Guidelines for Evaluating Alcohol and Other Drug Education and Training Programs

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National Centre for Education and Training on Addiction
Flinders University 2004

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Foreword

In 2001 the National Centre for Education and Training on Addiction was commissioned by the Australian Government Department of Health and Ageing to undertake a project titled Evaluating the Impact of Alcohol and Other Drug Education and Training: Development of a Measurement Tool and Training Evaluation Guidelines. Additional support for the Evaluation Project was provided by the South Australian Department of Health. This document is one of the key products stemming from that project.

The Evaluation Project involved the development of an evaluation tool called the Work Practice Questionnaire (WPQ), and a set of related resources. The WPQ is a purpose-built measurement tool designed to assess a wide range of factors that influence work practices in relation to alcohol and other drugs.

Three key products were developed as part of the Evaluation Project. They are:

1. A monograph examining factors influencing training transfer and work practice change in relation to alcohol and other drugs: *From Training to Work Practice Change: An Examination of Factors Influencing Training Transfer in the Alcohol and Other Drugs Field.*

   The monograph examines a wide range of factors that influence work practices in relation to alcohol and other drugs. It provides a review of evidence related to the influence of the factors assessed in the Work Practice Questionnaire on training transfer and work practice. Strategies to address each of the factors in order to facilitate training transfer and work practice change are also discussed.

2. Guidelines for evaluating AOD-related training: *Guidelines for Evaluating Alcohol and Other Drugs Education and Training Programs.*

   The guidelines provide user-friendly information for evaluating alcohol and other drug education and training programs. The guidelines have been designed to support both novice and experienced trainers to develop, implement and analyse their training evaluation. The document includes a discussion of the aims and context of various types of evaluation, useful tools, tips and readings.

3. A handbook for the Work Practice Questionnaire: *Handbook for the Work Practice Questionnaire (WPQ): A Training Evaluation Measurement Tool for the Alcohol and Other Drugs Field*.

   The handbook provides a detailed description of the WPQ and its psychometric properties. The WPQ is a purpose-built measurement tool designed to assess a wide range of factors that influence work practices in relation to alcohol and other drugs. It includes 17 scales covering four domains:

   1. Individual
   2. Team
   3. Workplace
   4. Organisational.

   A post-training section includes two scales. The Handbook describes how the tool can be used, provides results of the reliability and validity studies undertaken, and includes a copy of the full questionnaire.

Although these products are stand-alone documents, they have been designed to complement each other and form a comprehensive set of resources to improve training evaluation. Copies of all these documents, and other materials related to workforce development, are available from the NCETA website at www.nceta.flinders.edu.au. For further information about this project or assistance with your evaluation projects contact NCETA on 8201 7549.

Project Team

A large team worked on this project. The project team comprised:

Ms Darlene Addy
Dr Natalie Skinner
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This project was commissioned by the Australian Government Department of Health and Ageing. Additional support was provided by the South Australian Department of Health.

Thanks are extended to the original team of investigators who developed the tender. Original investigators included Associate Professor Steve Allsop, Ms Simone Cormack, Dr Sharyn Watts, Dr Paul Williamson, Professor John Keeves, Dr Kyle Dyer and Ms Carol Kennedy. The early groundwork undertaken by this group provided the basis for this innovative project.

Dr Sharyn Watts is thanked for contributing ideas and effort to early drafts of the Evaluation Guidelines. Thanks are also extended to the Project Reference Group (listed below) for their continued support, input and feedback. The contributions of Helen Maxwell for early formatting, Ms Joanne McDonald for technical advice, Ms Sue Rayner for instructional design assistance and Judith Saebel for desktop publishing and editorial assistance are gratefully acknowledged. The project team would also like to thank previous and current NCETA staff who reviewed drafts of the guidelines and provided feedback, especially Dr Natalie Skinner.

The assistance of staff from the Drug and Alcohol Services Council (DASC) Library, the Flinders University Library, and the University of South Australia Library is also acknowledged.

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Preface

The "Guidelines for Evaluating Alcohol and Other Drugs Education and Training Programs" are part of a larger project designed to address training evaluation in the alcohol and other drug (AOD) field. It stemmed from a need for better assessment and measurement of the factors that impact on the influence of AOD-related education and training on work practice.

It is increasingly recognised by trainers, educators, and organisations investing in education and training, that training outcomes must be measured not only in terms of changes in knowledge, skills and attitudes, but also against long-term sustainable outcomes, such as work practice change.

Measuring change in work practice attributed to education and training programs can be difficult. Education and training programs do not occur in isolation. A wide range of factors influence trainees' learning, including motivation to learn, attitudes, and existing knowledge. In addition, factors within the work environment, such as team members and supervisors, organisational systems and structures also impact on the uptake of learning and the transfer of training to work practice. There are many individual, organisational and systemic factors that can influence the transfer of AOD-related training to work practice and work practice change. Assessing the role of these factors can provide important information to guide the development of strategies to optimise the contribution of AOD-related education and training to work practice change.

These Guidelines describe the context in which different types of evaluation strategies are undertaken. They provide a framework to determine what factors can be measured in education and training evaluation. They also highlight when, why, and how evaluation of AOD-related training should be undertaken. These Guidelines are designed to provide a comprehensive overview of training evaluation, with particular attention to AOD-related training. They describe training evaluation strategies.

Other materials developed as part of this project include a training evaluation measurement tool called the Work Practice Questionnaire (WPQ), an accompanying handbook and a monograph that discusses the range of factors affecting work practice assessed in the WPQ. This suite of materials has been designed to support both novice and experienced trainers and evaluators to assess the factors that are likely to influence the transfer of AOD-related training and work practice change.

The Evaluation Guidelines are useful for anyone designing and managing education and training evaluations, including educators and trainers, independent evaluators, employers, managers, and program funders. Those more experienced in education and training evaluation may find it a useful tool for reflection on current practices and evaluation outcomes. For those new to training evaluation, these guidelines provide a basic introduction with references for further information.

INTRODUCTION

The "*Guidelines for Evaluating Alcohol and Other Drugs Education and Training Programs*" have been developed to assist educators, trainers, and managers to evaluate alcohol and other drug (AOD) education and training[1] programs. The Guidelines highlight the need for AOD education and training evaluations to be systematic and comprehensive. Evaluation strategies are addressed that focus on the delivery of training programs through to the transfer of training to work practice.

Considerable time and effort in the AOD field is directed towards the education and training of workers. The format of AOD training can vary widely, and includes informal short-term seminars, national training packages, and TAFE and university courses (Australian National Training Authority [ANTA], 2003; Kennedy & Roche, 2003). Such training aims to increase the knowledge and skills of workers, and change or enhance the work practices of these individuals on their return to the workplace. However, the mainstream education and training literature emphasises that investment in training usually results in few long-term outcomes, including changes to work practices of individuals on return to the workplace. In general, there is a low level of transfer to work practice of knowledge skills and abilities acquired through in training (Holton et al., 2000a).

It is important to recognise that AOD-related work practices can be influenced by a broad range of factors, including education and training. In order to ensure the greatest return on investment from education and training (i.e., training transfer and work practice change), the AOD field should examine systemic factors in the workplace that support and enhance training (Allsop et al., 1998).

A New Evaluation Tool

These Guidelines have been developed in conjunction with a new training evaluation tool, the Work Practice Questionnaire (WPQ) (Addy et al., 2004). The WPQ identifies factors that enhance or inhibit the transfer of newly acquired knowledge, skills and attitudes to work practice, and workers' capacity to achieve work practice change.

The WPQ is organised into four conceptual domains that assess a range of factors likely to influence training transfer and work practice change. The four domains are:

- Individual
- Team
- Workplace
- Organisational.

[1] The terms 'education and training' and 'training' are often used interchangeably. The term 'training' will be used throughout this document to denote 'education and training'.

The **Individual** domain relates to the personal characteristics, beliefs and views of individual workers. Traditionally, it is mostly factors within this domain to which AOD training evaluation has been limited. Individual factors address issues such as perceived role legitimacy and role adequacy, and attitudes towards responding to AOD issues.

The **Team** domain addresses factors that relate to work team dynamics such as team culture, workload pressure, team communication and morale. It is important to recognise that work groups and teams are becoming increasingly common, particularly in the health and human services sectors. Therefore, team factors are likely to exert a significant influence on individuals' capacity to transfer training and successfully change their work practice.

The **Workplace** domain addresses factors in the working environment that are likely to impact on training transfer and work practice change such as workplace feedback, workload and other pressures, availability of support and general working conditions (e.g., job security, remuneration). It is important to make a distinction between factors in this level, and those at the 'Organisational' level. Factors in the workplace domain specifically relate to an individual's perceptions of their everyday working environment, whereas the factors in the organisational domain address broader issues related to organisational functioning and effectiveness, which in turn may impact on individual work practice.

The **Organisational** domain addresses factors that impact on the functioning of the organisation as a whole, and hence may also impact on individual workers' capacity to transfer training and engage in effective work practice change. This domain includes factors that reflect individual workers' perceptions of the culture and climate within which they work (e.g., organisational role legitimacy, professional development opportunities, and opportunity for staff input). It also includes systems factors that may influence the functioning of the entire organisation, and workers' perceptions of the organisation's openness to change and review.

This document provides an overview of techniques to evaluate the effectiveness of education and training programs. It has been designed as a resource for people conducting evaluations of AOD education and training programs. The importance of incorporating evaluation into the development and implementation of training programs is highlighted. The Guidelines provide:

- an outline of the different types of program evaluation
- references for those seeking more detailed information, and
- useful addresses and websites on evaluation.

Structure of the Document

Chapter 1, **Evaluation – An Overview**, provides a brief summary of training evaluation. It summarises the reasons why evaluation is important and outlines different types of evaluation that can be undertaken to assess and measure the short- and long-term outcomes of training.

The broad range of factors other than training that can influence trainees' work practices are summarised. This chapter also provides a useful checklist for experienced evaluators.

Chapter 2, **Evaluating Education and Training Programs**, outlines the four different levels at which training evaluation can be conducted (reaction, learning, behaviour, results), and three types of evaluation are discussed (process, impact and outcome).

Chapter 3, **Training Needs Analysis** (TNA), outlines why the assessment and analysis of workers' and organisational training needs is an important initial stage in a training program. It looks at how the outcomes of a TNA can be incorporated into evaluation.

Chapter 4, **The Evaluation Plan**, discusses the importance of developing a comprehensive evaluation plan, and techniques to develop an effective evaluation plan.

Chapter 5, **Data Collection**, outlines a range of quantitative and qualitative data collection methods that can be used in the evaluation of training programs and discusses the appropriate use of both methodologies.

Chapter 6, **Survey and Questionnaire Design**, summarises key steps in survey and questionnaire design. Basic techniques in questionnaire development are outlined.

Chapter 7, **Data Analysis and Interpretation**, outlines the basic steps in quantitative and qualitative analysis of evaluation data. It looks at how to code, classify and process data to provide meaningful information about a training program.

Chapter 8, **Report Writing**, outlines a structure for reporting evaluation findings. It provides a simple format to highlight key results and recommendations from the training evaluation. Dissemination of evaluation findings is also discussed, in particular the role of training evaluations in the improvement of future training programs.

Each chapter is intended to be a 'stand-alone' document and as such some content is repeated in the different chapters.

A Case Study Illustration

A training and evaluation case study is provided to illustrate the different steps in the evaluation of a training program. The case study is based on a training program designed to increase health workers' ability to provide appropriate services and up-to-date information to injecting drug users.

CHAPTER 1
EVALUATION – AN OVERVIEW

Evaluation is an essential component of alcohol and other drug (AOD) education and training programs. It can provide important information regarding the effectiveness of a training program and identify ways in which it can be improved. Evaluation of the short- and longer-term outcomes of AOD education and training has potential to provide examples of quality evidence-based training. It can also provide valuable information for the development of future training programs.

This chapter provides a brief overview of the key issues involved in the evaluation of training programs. The topics include:

- What is evaluation?
- Why conduct evaluations of training programs?
- What types of evaluation are available?
- When to evaluate
- What aspects of the training program should be evaluated?
- How should a training evaluation program be conducted?

Subsequent chapters provide more detailed information on these key issues.

What is Evaluation?

Evaluation of training is best understood as a process of continual improvement to inform best practice. A comprehensive evaluation will:

- report on the processes involved in training
- assess the effectiveness and efficiency of a program
- identify what worked well and areas for improvement
- highlight any unintended positive or negative outcomes
- recommend ways to improve the program and the development of future programs (Kirkpatrick, 1998; Patton, 2002).

Why Conduct Evaluations of Training Programs?

Evaluation of training has many different functions. It can:

- assess the training needs of the target population
- collect evidence on the short- and long-term impact of training
- assess the effectiveness and efficiency of the program
- determine what works, what doesn't work and why
- identify ways to improve training
- compare one training program with another
- report to stakeholders, such as funders, participants, staff or the community (Owen & Rogers, 1999).

The specific purpose of an evaluation will determine the orientation and timing of the evaluation and the type of information collected. Therefore, it is important to set clear goals and establish the intended outcomes of training at the outset.

Evaluation is crucial to the development of effective AOD training. Evaluation data collected during training will help determine the effectiveness, relevance and value of training activities. It can also identify aspects of the training that need modification (Goldstein & Ford, 2002). However, a comprehensive evaluation of an AOD training program should also aim to examine what happens when the trainee returns to their workplace.

Often only the short-term effects of AOD training are evaluated and reported. It is also important to investigate the impact of training on participants' work practices, especially at extended points in time after the completion of training (e.g., 12 months post-training). Evaluation at this level may also identify the range of factors that influence the transfer of training to work practices (Allsop et al., 1998).

What Types of Evaluation Are Available?

There are various types of evaluations and some of these are described below. The type of evaluation undertaken will depend on the purpose of the evaluation and the information that key stakeholders require from the evaluation findings.

Formative and summative evaluations

The terms "formative" and "summative" relate to the intention or purpose of an evaluation. The purpose of an evaluation can determine the timing and method of collecting evaluation data.

Formative evaluations are conducted during the development and implementation of a program. They are responsive to feedback and can enable improvements to be made during the program. The purpose of formative evaluation is to improve a program (Patton, 2002).

Summative evaluations report on the overall implementation and impact of a training program so that decisions can be made regarding the merit and future of a program. Summative evaluation can determine a program's effectiveness (Patton, 2002:213).

It is important to distinguish these terms from other evaluation terms.

Process, impact and outcome evaluations

There are three distinct types of evaluation: process, impact and outcome evaluations (Hawe et al., 1990; Owen, 1993; Owen & Rogers, 1999; Weiss, 1998). A brief outline of these three types of evaluation is presented below, with more detail provided in Chapter 2.

- **Process evaluation** assesses the implementation of the program activities, quality of training, participant satisfaction and the extent to which training activities were conducted as planned.
- **Impact evaluation** focuses on the immediate effects of the program. It assesses how well the objectives of the training program were met by measuring the learning that occurs during training.
- **Outcome evaluation** focuses on the longer-term impacts of a program. It assesses the extent to which the goals of a program have been achieved. Outcome evaluations are typically conducted after training has been completed. Evaluation at this level is designed to assess change in participants' work practices, and the factors that influence participants' capacity to transfer their training to work practice.

As shown in Figure 1.1 below, a comprehensive evaluation incorporates process, impact and outcome evaluations.

Levels of Evaluation

Evaluation can also be considered in terms of its impact on training. Kirkpatrick's (1998) four-level model is one of the most widely accepted approaches to training evaluation. A detailed discussion is provided in Chapter 2.

Kirkpatrick's model specifies four levels of evaluation criteria that measure separate, but related, impacts of training. These are:

- **Reaction** – participants' perceptions of the training course
- **Learning** – improvement in knowledge, skills, & abilities
- **Behaviour** – change to work practices and behaviours
- **Results** – organisational outcomes and returns (Kirkpatrick, 1998).

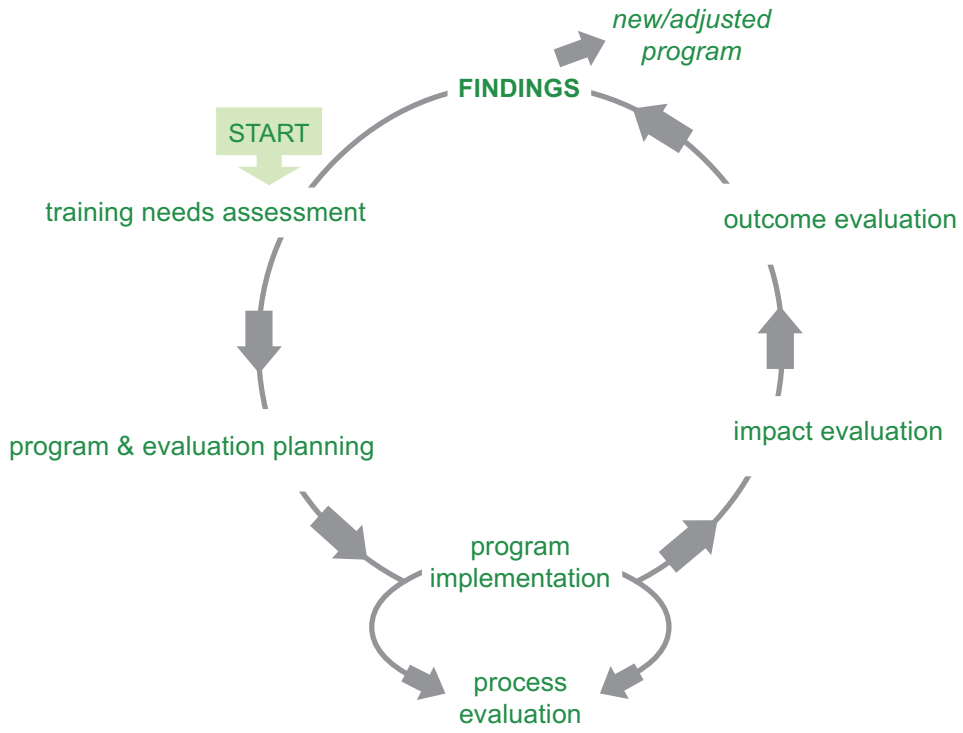

Figure 1.1
The training and evaluation cycle (adapted from Hawe et al., 1990, p. 78).

When Should Evaluations Be Conducted?

The evaluation process ideally begins with an analysis of the training needs of workers and their organisation (i.e., a training needs analysis). Identified needs should be prioritised and translated into clear and specific goals and objectives for the training program. Information collected in the training needs analysis regarding participants' knowledge, skills and abilities can be compared with post-training data to measure the impact of training. Training needs analyses are discussed in further detail in Chapter 3.

For optimal effectiveness, evaluation should be incorporated into the planning and implementation stages of a training program (see Chapter 4). When conducted in parallel with training, evaluation can become part of a continual improvement process by providing feedback about the training and a basis for planning future programs.

Research has identified the need for follow-up evaluation of the long-term outcomes of AOD training (Allsop et al., 1998). Follow-up evaluation can be conducted when participants have returned to their workplace. Depending on resources available this outcome evaluation could take place any time after the completion of training (e.g., one to 12 months later).

What Aspects of the Training Program Should Be Evaluated?

Comprehensive evaluation of an education and training program will assess:

1. implementation of the program (i.e., quality of the program delivery, number of participants, timing and location of training, training processes and procedures)
2. participants' perceptions of training content and implementation
3. the extent of learning that occurred (i.e., changes in participants' knowledge, skills and abilities)
4. participants' behaviour change (i.e., post-training change in work practice).

A comprehensive evaluation should also incorporate examination of factors that enhance or inhibit the impact of training on participants' work practices. The latter is a crucial, but often over-looked, aspect of evaluation. It is highlighted here as a core component of the evaluation of education and training programs.

How Should a Training Evaluation Be Conducted?

Evaluation is a multi-stage process requiring careful planning and execution at each stage. Table 1.1 below provides an overview of the process involved in conducting a comprehensive training evaluation.

Table 1.1
Overview of a Comprehensive Training Evaluation Program

STAGE	PROCESSES/ACTIVITIES INVOLVED
Evaluation and program planning	• identify key stakeholders' training needs • design the training program to meet identified needs • specifying goals, objectives and strategies of the training program • clarify the purpose of the evaluation (formative or summative) • confirm available resources (financial, human, and time factors) • decide on evaluation focus and strategies (e.g., process, impact and/or outcome evaluations).
Data collection	• organise measurement tools • collect evaluation data.
Data analysis and interpretation	• tabulate the data • interprete the information to identify patterns of strengths and weaknesses of the program as they relate to achievement of training goals.
Reporting findings	• present the evaluation findings and any recommendations in a clear report format and in a timely manner • modify ongoing programs in response to evaluation findings.

Note. Adapted from Kemmis, 1994; Owen & Rogers, 1999.

Should All Training Programs Be Evaluated?

All AOD training programs can benefit from evaluation. However, the following issues should be considered to determine the type of evaluation that might be possible:

1. What is the purpose of evaluation?
2. Who has commissioned the evaluation?
3. Can the program be adequately evaluated?
    - does it have clearly stated goals or aims and objectives?
    - are the objectives clearly defined and measurable?
4. Have trainees consented to participate in the evaluation?
5. Is the proposed evaluation and its methodology appropriate and practical in terms of the time and resources available to undertake the evaluation?

Factors That Influence Training Transfer and Work Practice Change

It is important to recognise that training alone may not be sufficient to achieve a desired change in work practice. A broad range of factors are likely to influence participants' capacity to transfer training to their work practice and to initiate and effectively maintain work practice change. Assessment of these factors should be included in a comprehensive training evaluation program.

It is only relatively recently that attention has been directed to the evaluation of the factors that influence training transfer and work practice change once the trainee returns to the workplace. As a result, there have been few instruments or tools developed to assist in this type of evaluation. An example of a recently developed evaluation tool specifically designed for this purpose is the NCETA Work Practice Questionnaire (WPQ). The WPQ is a structured evaluation tool that has been designed to measure a range of factors that may reinforce or hinder the transfer of training to work practice.[2] A copy of the WPQ is included at the end of this document.

An overview of the key factors assessed in the WPQ is provided in Figure 1.2. As shown in Figure 1.2, the WPQ is organised into four domains of factors likely to impact training transfer and work practice change: Individual, Team, Workplace, and Organisational.

[2] The *Evaluating Education and Training Guidelines* are part of a suite of materials developed by NCETA that include a Work Practice Questionnaire, an accompanying handbook, and a monograph that identifies a wide range of factors that can affect work practices. More detailed information on ways to administer the WPQ are outlined in a handbook that forms part of this series of documents on evaluation (http://www.nceta.flinders.edu.au).

Figure 1.2
Conceptual map of work practice factors.

Appendix A outlines a selection of strategies that can be used to improve the transfer of training and maintenance of work practice change.

Summary

Comprehensive evaluations of an education and training program can collect information to:

- determine the short- and long-term effectiveness of a training program
- identify ways in which the training program can be improved.

To be most effective evaluation should be carefully planned and incorporated into the implementation of the training program.

There are two broad orientations of evaluations:

- Formative evaluation, which is conducted during the development and implementation of a program, is responsive to feedback and can enable improvements to be made during the program
- Summative evaluation reports on the overall implementation and impact of a program so that decisions can be made regarding the merit and future of the program.

The main types of evaluations are:

- Process evaluation which assesses the implementation of training
- Impact evaluation which focuses on the immediate effects of training
- Outcome evaluation which assess the long-term outcomes of training. It focuses on trainees' work practices after training has been completed.

Process, impact and outcome evaluations can provide data for formative and summative evaluations.

Evaluation is a multi-stage process. Each stage needs to be carefully planned and implemented. The key stages are:

- Evaluation planning, in conjunction with the planning and implementation of the training program
- Data collection
- Data analysis and interpretation
- Reporting of findings and recommendations.

Evaluation of training can assess the:

- Implementation of the program
- Reactions of trainees to the program
- Learning that occurs
- Short- and long-term behaviour changes in trainees' work practices
- Factors that affect the impact of training on participants' work practices.

Recommended Readings

Allsop, S., Cormack, S., Addy, D., Ashenden, R., Ask, A., & Beel, A. (1998). *Education and training programs for frontline professional responding to drug problems in Australia.* [Report to the Department of Health and Family Services, Canberra]. Adelaide, South Australia: National Centre for Education and Training on Addiction (NCETA).

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CHAPTER 2
EVALUATING EDUCATION AND TRAINING PROGRAMS

Education is not that
we know more, but that
we behave differently
(John Ruskin)

A wide range of approaches to education and training are used in the AOD field including informal short-term seminars, national training packages, TAFE and university courses. The principal aim of these training programs is to bring about work practice change. Therefore, a comprehensive evaluation should examine the content and implementation of a training program and also the outcomes of training once participants' have returned to their workplace.

This chapter discusses the key components of a comprehensive training evaluation program. Two separate, but related, dimensions of training evaluation are considered:

1. Levels of training evaluation (reaction, learning, behaviour, and results)
2. Types of training evaluation (process, impact, and outcome).

Levels of Training Evaluation

As noted in Chapter 1, Kirkpatrick's (1998) four-level model is one of the most widely accepted approaches to training evaluation. The four levels are:

1. **Reaction** – participants' perceptions of the training course
2. **Learning** – improvement in knowledge, skills, and abilities
3. **Behaviour** – change to work practices and behaviours
4. **Results** – organisational outcomes and returns (Kirkpatrick, 1998).

As shown in Table 2.1 below, Kirkpatrick's model specifies four levels of evaluation criteria that measure separate, but sequential, impacts of training. It is recommended that an evaluation strategy start at Level 1 and move through each level in sequence. As fundamental as it may sound, it is important to collect information on participants' reactions to a training program. It is important for several reasons, not least of which is the fact that trainees will probably not be motivated to learn if they do not react favourably to the content and delivery of a training program.

A Level 1 evaluation would assess how trainees' reacted to the content and the implementation of the training program or session. It would usually cover components such as course materials, trainer's delivery style and skills, facilities, program time and timing and the selection of participants.

Table 2.1
Kirkpatrick's Four Levels of Evaluation Criteria

LEVEL	CRITERION	EVALUATION QUESTIONS
1	Reaction	How did participants feel about the course?
2	Learning	How much did participants learn?
3	Behaviour	Have there been any changes in work practices after participants returned to their workplace?
		Has there been any transfer of training to work practice?
4	Results	Has the training made a difference in work performances?
		What has been the long-term impact of training?

Evaluation at the 'reaction' level usually takes the form of a written questionnaire. This type of evaluation can provide useful information regarding the aspects of course content and delivery that participants found to be most valuable, motivating and enjoyable. Whilst an essential component of a broader evaluation strategy, reaction evaluation alone is inadequate as it does not provide information on the longer-term impact of training on work practice.

An evaluation at Level 2 can measure how much participants have learnt during the training program. It can assess changes in attitudes and skill levels. Evaluation data at Levels 1 and 2 is comparatively easy to collect. For instance, participant feedback sheets and pre- and post- training tests (refer to appendices for examples) will provide adequate and appropriate information for evaluation purposes.

Evaluations should be conducted at Levels 1 and 2 before moving on to the higher levels.

The 'reactions' and 'learnings' that are measured at these lower levels can provide valuable information for a comprehensive evaluation. For instance, a Level 3 evaluation of behaviour in the workplace may find that no change in behaviour has occurred after training. However, unless evaluation has been carried out at Level 2, it will not be possible to ascertain whether the failure was due to lack of learning transfer or to a failure for learning to take place initially.

Levels 3 and 4 evaluation criteria relate to the longer-term impact of education and training programs. Evaluation at these levels is concerned with participants' behaviour once they have completed the training and returned to the workplace. It involves identifying changes in behaviour that occur as a result of training. This higher level evaluation can also identify factors that help or hinder trainees' capacity to transfer training into their work practices. It becomes progressively more difficult to collect and interpret findings (i.e., attribute behaviour changes to training) as the evaluation advances through to Levels 3 and 4; but it should not be so difficult that one would be discouraged from undertaking Level 3 and 4 evaluations. A comprehensive evaluation of training would usually aim to identify any higher level factors that influence trainees' ability to implement new work practices.

Most accredited Australian National Training Authority (ANTA) training packages in the vocational education system require skill development and assessment of behaviour at

Level 3 (changes to behaviour or work practice). The standards of the Australian Quality Training Framework on assessment and assessors may assist trainers and managers to identify and evaluate training outcomes (ANTA, 2003; Australian Qualifications Framework [AQF], 2003).

The fourth level of evaluation relates to the outcomes of training in terms of organisational outcomes and results. Evaluation at level four is the most important and most challenging to conduct. The aim of evaluation at this level is to determine the tangible benefits of the training in terms of work practice improvement and organisational performance. Evaluation at this level involves identifying the purpose of the training and determining if this purpose was achieved. It can also include conducting a cost-benefit analysis to determine if the costs involved (e.g., time, money, resources) were justified in terms of objective outcomes (benefits). Appendix A outlines some ways to improve the transfer of training and maintenance of work practice change.

The Role of the WPQ in Training Evaluation Programs

The Work Practice Questionnaire (WPQ) is a purpose-built training evaluation measurement tool designed by NCETA to assess a wide range of factors may influence training transfer and work practice change resulting from AOD-related training. The WPQ includes a post-training section with two scales that relate to Kirkpatrick's first level of evaluation (participant reaction). The WPQ Post-Training Scales address reactions to training (perceived changes in knowledge and skills due to training) and perceived usefulness of training.

The WPQ can also be used to measure training outcomes at Kirkpatrick's third level of evaluation (behaviour). The four main domains of the WPQ are designed to measure factors at the individual, team, workplace, and organisational levels that influence training transfer and work practice change. Finally, the WPQ can provide information related to level four of Kirkpatrick's model (outcomes) via the assessment of factors that indirectly influence organisational outcomes (e.g., post-training changes in team cohesion, team capacity and perceived organisational role legitimacy).

Types of Training Evaluation: Process, Impact and Outcome

A comprehensive evaluation of AOD training would usually involve process, impact and outcome evaluations incorporating the 4 levels of evaluation criteria, (1) participants' reaction to training, (2) learning, (3) behaviour and (4) results. A brief outline of these three types of evaluation is presented below.

- **Process evaluation** assesses the implementation of the program activities, quality of training, participant satisfaction and the extent to which training activities were conducted as planned.
- **Impact evaluation** focuses on the immediate effects of the program. It assesses how well the objectives of the training program were met by measuring the learning that occurs during training.

- **Outcome evaluation** focuses on the longer-term impacts of a program. It assesses the extent to which the goals of a program have been achieved. Outcome evaluations are typically conducted after training has been completed. Evaluation at this level is designed to assess change in participants' work practices, and the factors that influence participants' capacity to transfer their training to work practice.

A comprehensive evaluation of AOD training should include process, impact and outcome evaluations that address the four levels of evaluation criteria specified in Kirkpatrick's (1998) model: (1) participants' reaction to training, (2) learning, (3) behaviour, and (4) results. Table 2.2 outlines how the four levels of Kirkpatrick's training evaluation model can be integrated into process, impact and outcome evaluations.

Table 2.2
Evaluation Types and Levels

EVALUATION STAGE	LEVEL	CRITERION	EVALUATION QUESTIONS	TIMELINE	MEASUREMENT TOOLS
Process	1	Reaction	How was the training delivered? How did participants feel about the course?	During and immediately after training	Rating sheets including open-ended questions
Impact	2	Learning	To what extent did participants' knowledge, skills, & abilities improve post-training?	Before and immediately after training	Pre- and post-tests, simulations
Outcome	3	Behaviour	Have there been any changes in work practices after participants returned to their workplace? Has there been any transfer of training? What factors influence the transfer of training?	Appropriate intervals such as 2 weeks, 6 months, and 1 year	WPQ, work performance measures, interviews
Outcome	4	Results	Has the training influenced work performance? That is, what has been the long-term impact for the participants, their organisation and clients?	Long-term follow-up (e.g., 6 months, 1-2 years), depending on resources	WPQ, personal logbooks, interviews, organisational data

Note. Adapted from Kirkpatrick, 1998.

The following section provides more detail about process, impact and outcome evaluations. It is recommended that these three types of evaluation (process, impact, outcome) are undertaken sequentially to measure the short- and longer-term impact of a training program.

Process evaluation: Level 1 (Reaction)

Process evaluation assesses the activities of a training program to determine if the training was delivered as planned. It examines what happens within a program by evaluating the:

1. Delivery of the training program
2. Quality of the training
3. Participants' reactions to the training.

1. Delivery of the training program

Evaluation of the training delivery addresses factors such as:

- who participated in the program
- how they were selected
- how many participants there were
- where the training was conducted
- timing of the training.

2. Quality of the training

Key issues to consider when evaluating the quality of a training program key issues to consider include program content, relevance to the participants and the training methods used. Table 2.3 outlines some key questions to consider when designing a process evaluation of program quality.

Table 2.3
Process Evaluation: Program Quality

PROGRAM COMPONENT	KEY QUESTIONS TO CONSIDER
Content	• Is the content underpinned by the best available evidence? (i.e., based on consensus about best practice or empirical data) • Are the course materials of high quality? (consider format, readability, graphics, and clarity)
Relevance	• Is the training program linked with participants' previous experiences and usual work role?
Training methods	• Are the training methods based on adult learning principles? • Does the trainer use the most effective methods for maintaining interest and teaching the desired attitudes, knowledge, and skills? (consider the different types of learning strategies used) • Are participants encouraged to take responsibility for their own learning, and the transfer of new knowledge and skills into work practices?

Note. Adapted from Allsop et al., 1998.

3. Participants' reactions to the training

It is important to assess participants' satisfaction with the training program. If participants do not react favourably to a program they may not be motivated to learn (Kirkpatrick, 1998). For instance, the timing of the program could be inconvenient and disruptive to participants' work responsibilities. The evaluation of participants' reactions provides important information that can improve the delivery and content of future training programs.

Table 2.4
Process Evaluation: Participants' Reactions

PROGRAM COMPONENTS	QUESTIONS TO ASK
Content	Was the content relevant to the participants' work role? Were any topics or issues overlooked or not covered sufficiently? To what extent did the subject content meet the needs of the participants? Were the course materials satisfactory?
Teaching methods	Was the style of delivery satisfactory? Was the pace of delivery appropriate?
Facilities	Was the venue location convenient? Were the facilities satisfactory?
Program schedule	Was the timing of the course convenient? Was the program length appropriate?

Note. Adapted from Kirkpatrick, 1998.

When should a process evaluation be conducted?

Process evaluation can be undertaken at different stages of a training program. The training timetable will influence decisions about when to collect process evaluation information. For instance, if training is delivered one day a week over a series of weeks then it would be appropriate to collect some process evaluation feedback each day of the training. The process information collected could be used to make ongoing improvements to the program.

When a training program is delivered to different groups of people over different periods of time, a series of process evaluation measures should be taken to ensure that the evaluation information collected is consistent between groups. When a series of training workshops are delivered to different groups of participants it is important to check the consistency of the training processes, and the extent to which the training achieved the goals of the program for each group (Hawe et al., 1990).

The use of process evaluation data to improve an ongoing training program is demonstrated in the case study provided in Box 2.1.

How is a process evaluation conducted?

There is no standard method to conduct process evaluations. Process evaluations should be content and course specific. Data collection tools should be designed in-house to be relevant to the specific program and experiences of the participants.

Process evaluation data is relatively easy to collect. For example, participants can be asked to complete reaction sheets (these can be a basic as 'smiley forms'). In order to maximise

BOX 2.1: PROCESS EVALUATION FEEDBACK

A series of workshops have been planned to provide AOD workers with up-to-date and relevant information on safer injecting practices. After a few workshops have been conducted and participant feedback has been analysed, the trainer can identify the strengths and weaknesses of the program.

Sample case study – participants report high levels of satisfaction with the interactive delivery style of the training program. However, a significant number of participants requested more information from an injecting drug user's perspective. The trainer decides to modify future workshops and include an interactive question and answer session with a former injecting drug user.

response rates, reaction forms should be administered to participants before they leave the training venue. There is often a low response rate when participants are asked to return evaluation forms at a later (post-training) date, so this is best avoided if possible.

A range of strategies can be used to maximise the useful information gained from reaction sheets including:

- designing a form that will quantify reactions
- encouraging written comments and suggestions
- aiming for 100% response rates by setting aside some time for participants to complete the form within the training program
- encouraging honest responses by providing anonymity (Phillips, 1997).

Participants can also be asked for comments and suggestions on how the training course can be improved. A sample process feedback form is contained in Appendix B.

Process evaluation data should be carefully analysed. It is important to consider both positive and negative feedback, and to explore potential explanations for negative feedback. For example, some participants may report unfavourably on a particular aspect of the training, however this does not necessarily mean that this aspect of the training program does not work or should not be continued. Further investigation with participants may reveal that the main reason for their unfavourable responses was a lack of familiarity with and understanding of new learning methods (e.g., participatory learning strategies).

Advantages of process evaluation

Process evaluation can be useful for the development of new training programs by providing important feedback regarding program delivery styles and content most likely to satisfy participants' expectations. In established programs, process evaluation is a form of quality assurance. It ensures that the training is delivered according to the program plan, and that the delivery of the program meets standards of good practice (Hawe et al., 1990).

Limitations of process evaluation

Process evaluation of participants' reactions to training provides information on the content and delivery of training from the perspective of one key stakeholder group. It does not measure the level of learning or work practice change resulting from a training program. It is important to recognise the possibility that participants may report a high level of satisfaction with training delivery and content, but fail to acquire new knowledge and skills or change their work practice.

Hence process evaluation, while important, is limited in terms of what it can reveal about the effectiveness of a training program in regard to change in participants' knowledge, skills, abilities, and work practice. As discussed below, these types of outcomes are assessed by impact and outcome evaluations.

Impact evaluation: Level 2 (Learning)

During an AOD training program participants may be exposed to new:

- knowledge (e.g., facts, procedures, policies, theories)
- attitudes (e.g., values, perceptions, beliefs), and
- skills (technical competence).

Impact evaluation assesses learning outcomes (Level 2 criteria) in regard to changes in participants' knowledge, skills, and abilities from pre- to post-training.

When should an impact evaluation be conducted?

Impact evaluation is usually carried out at the end of a training session or program. Ideally, participants' knowledge, skills and abilities will have been assessed prior to training during a needs analysis or pre-training test. Comparison of pre- and post-training measures can be used to assess the degree to which participants' knowledge, skills, and abilities have changed as a result of training.

How is an impact evaluation conducted?

Impact evaluation would usually start with:

- clarification of the learning objectives of a training program, and
- identification of indicators that would quantify progress towards these objectives.

Following clarification of learning objectives and indicators, appropriate evaluation tools can be developed to measure and assess the impact of training. Questionnaires addressing the content covered in the program are the most common measurement instruments used in impact evaluation, but other tools can also be used such as interviews and focus groups. Questionnaires can be administered before and after training to collect data to measure changes in participants' knowledge, attitudes and skills.

Chapter 6 provides some introductory advice regarding the construction of questionnaires. A sample impact evaluation questionnaire is provided in Appendix C.

The level of pre- and post-training data collection and analysis will be determined by the available resources and the type of training program (e.g., university semester course vs a one-day training session). Chapter 7 provides an outline of basic techniques for statistical analysis that can be used to analyse impact evaluation data. If more complex statistical analyses are required, the reader is advised to seek guidance and refer to the recommended readings provided in Chapter 7.

A range of interactive activities can also be used to evaluate participants' knowledge, attitudes and skills, for example:

- job or task simulation (e.g., participants' counselling skills evaluated in a simulated client session)
- case study analysis, in which participants analyse a realistic scenario and determine the best course of action
- role plays, in which participants practise a newly learned skill in an assigned role (Phillips, 1997).

Participants can also be asked to self assess and report their skill levels.

Depending on the resources available, an impact evaluation can also include a control group that does not attend the training. The characteristics of the training and control groups should be as similar as possible, and participants randomly allocated to each group. Both groups should experience the same environmental influences in the workplace. When these conditions are met, then any post-training differences in work practice between the two groups can be more confidently attributed to the training program. However, the use of control groups may not always be practical, because of resource constraints (e.g., human, financial, and time) (Phillips, 1997).

Advantages of impact evaluation

Impact evaluation can provide feedback on the effectiveness of training in regard to increasing knowledge, changing attitudes, and developing new skills in participants. This type of evaluation can also be used to assess the extent to which training met program objectives and goals.

Limitations of impact evaluation

Impact evaluation only measures the short-term effect of a training program (i.e., changes in knowledge, skills and abilities). It does not provide information on longer-term outcomes of training after participants have returned to their workplace.

As discussed in Chapter 1, a range of individual, team, and organisational factors can support or hinder participants' capacity to transfer their newly acquired knowledge, skills, and abilities to work practice (Goldstein & Ford, 2002). For example, post-training support, supervision, and practice have been identified as factors that can sustain and reinforce participants' learning (Allsop et al., 1998).

A comprehensive evaluation strategy should consider longer-term outcomes of training by assessing change to, and maintenance of changes, to work practice after participants have

returned to the workplace. As discussed below, training transfer and longer-term outcomes of training are assessed by outcome evaluations.

Outcome evaluation: Level 3 (Behaviour) and Level 4 (Results)

Outcome evaluation assesses the degree to which the aims and goals of the training program were achieved, in other words the longer-term effect of training on participants' work practice and performance.

Outcome evaluation should be undertaken some time after the completion of training (e.g., 3, 6, and/or 12 months post-training). The focus of outcome evaluations is on participants' behaviour (i.e., work practice), and factors that influence the capacity of participants to transfer training to their work practice and to maintain work practice change.

As Figure 2.1 shows, the acquisition and mastery of new behaviours and work practices is a process that takes some time. Outcome evaluations assess the extent to which participants are able to maintain work practice change in the long term: in other words, whether newly learnt behaviours and work practices improved, remained stable, or declined following training.

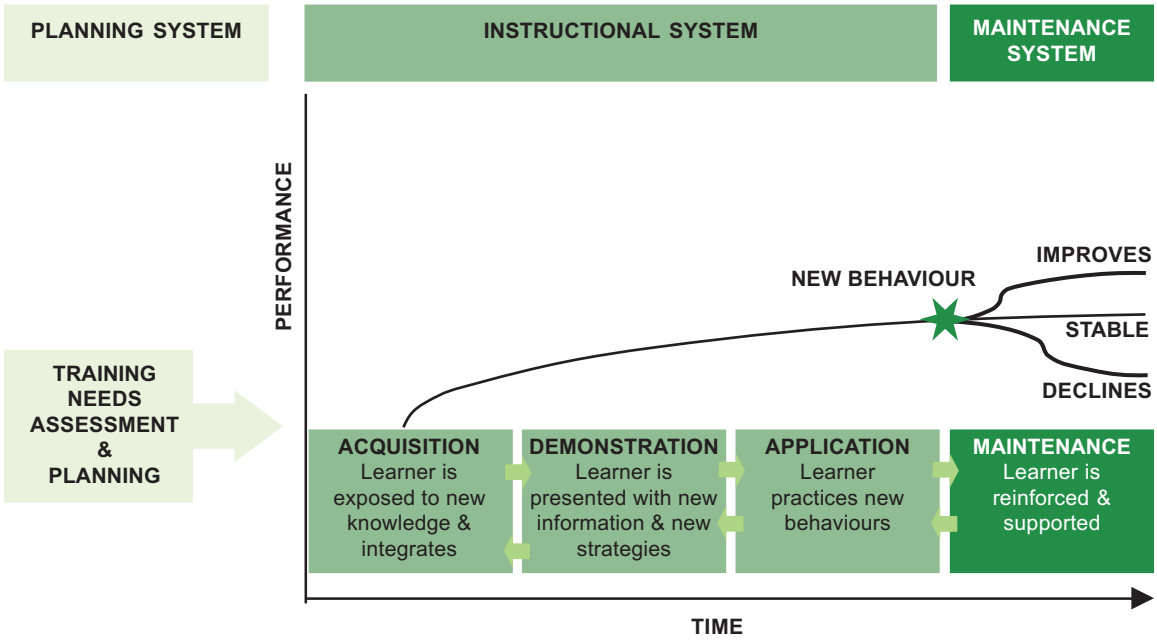

Figure 2.1
Training transfer and maintenance of new workplace behaviour (adapted from Parry, 1997, p. 50).

Factors likely to influence training transfer and work practice change

The transfer of training involves the application and maintenance of newly acquired knowledge, skills and abilities in one's work practice. Factors affecting training transfer include:

- program design, including appropriate content and strategies which support participants to transfer training into their work practices

- individual participant characteristics, including ability, previous experience, motivation, self-efficacy
- organisational environment including team and management support, opportunities to use new behaviours (Goldstein & Ford, 2002; Holton et al., 2000a; Parry, 1997).

A comprehensive outcome evaluation will consider the broad range of factors affecting training transfer and work practices of participants. For a more detailed discussion of the individual, team, workplace, and organisational factors likely to impact training transfer and work practice change, see the NCETA monograph, *From Training to Work Practice Change: An Examination of Factors Influencing Training Transfer in the Alcohol and Other Drugs Field* (available from the NCETA website www.nceta.flinders.edu.au).

When should an outcome evaluation be conducted?

It is recommended that sufficient time be allowed to elapse following training to give participants the opportunity to practice and master the application of their newly acquired knowledge, skills and abilities to their work practice. An outcome evaluation should be conducted some weeks or months after completion of the training program.

How is an outcome evaluation conducted?

An outcome evaluation usually involves comparison of pre- and post-training measures of participants' behaviours and work practices. Work practices can be assessed using a range of methods including:

- questionnaires
- interviews
- focus groups
- on-the-job observation (this may not always be practical in an AOD setting because of privacy issues)
- logbooks
- examination of organisational data (e.g., number of brief interventions conducted)
- audits of client records to assess intervention techniques used
- evaluation of participants' work practice by peers and/or supervisors (Parry, 1997; Phillips, 1997).

A combination of these methods will generate the most comprehensive data for outcome evaluations. If there are significant budget and time constraints a follow-up questionnaire may be the most practical way in which to conduct an outcome evaluation.

Strengths of outcome evaluations

Outcome evaluation is an important stage of a comprehensive training evaluation. If an evaluation stops after the process and impact stages, it might be concluded prematurely that the training program was a success simply because the program was well received by the participants, and their knowledge and skills increased. However, unless an outcome evaluation is conducted, the impact of training on participants' work practice will be unknown.

The findings of an outcome evaluation can be used to determine more effective and efficient ways to change work practices and improve client outcomes. For example, an outcome evaluation may indicate that changes are needed regarding the strategies organisations and supervisors use to support participants as they transfer their training to work practice.

In addition to the formal components of an outcome evaluation, participants' feedback can help to identify barriers and enablers to performance change in the workplace. For example, it may be useful to ask participants to suggest non-training options for improving their work performance. This information may be valuable when planning future training, undertaking needs assessments or negotiating with organisations regarding the nature of training of most relevance.

Limitations of outcome evaluations

Outcome evaluation can be more difficult and time consuming to undertake than process and impact evaluations. Financial constraints may also affect the scope of an outcome evaluation. In addition, participants may not have much time to take part in evaluation activities once they have returned to the workplace. A follow-up questionnaire which has been specifically designed to assess a training program may be the most time- and cost-efficient means of conducting an outcome evaluation.

It is important to recognise that external events or conditions may also affect participants' work practices. For example, an independent health promotion campaign may produce a change in AOD client presentations. It is important to identify and account for these types of external factors when conducting an outcome evaluation (Goldstein & Ford, 2002; Weiss, 1998).

A Comprehensive Training Evaluation Program

A comprehensive evaluation of AOD training will incorporate process, impact and outcome evaluations in order to assess both the short- and long-term effects of training. Particular emphasis should be placed on the application, integration and maintenance of participants' learned knowledge, skills and attitudes in the workplace. Figure 2.2 provides an overview of a comprehensive training evaluation program that incorporates process, impact, and outcome evaluations.

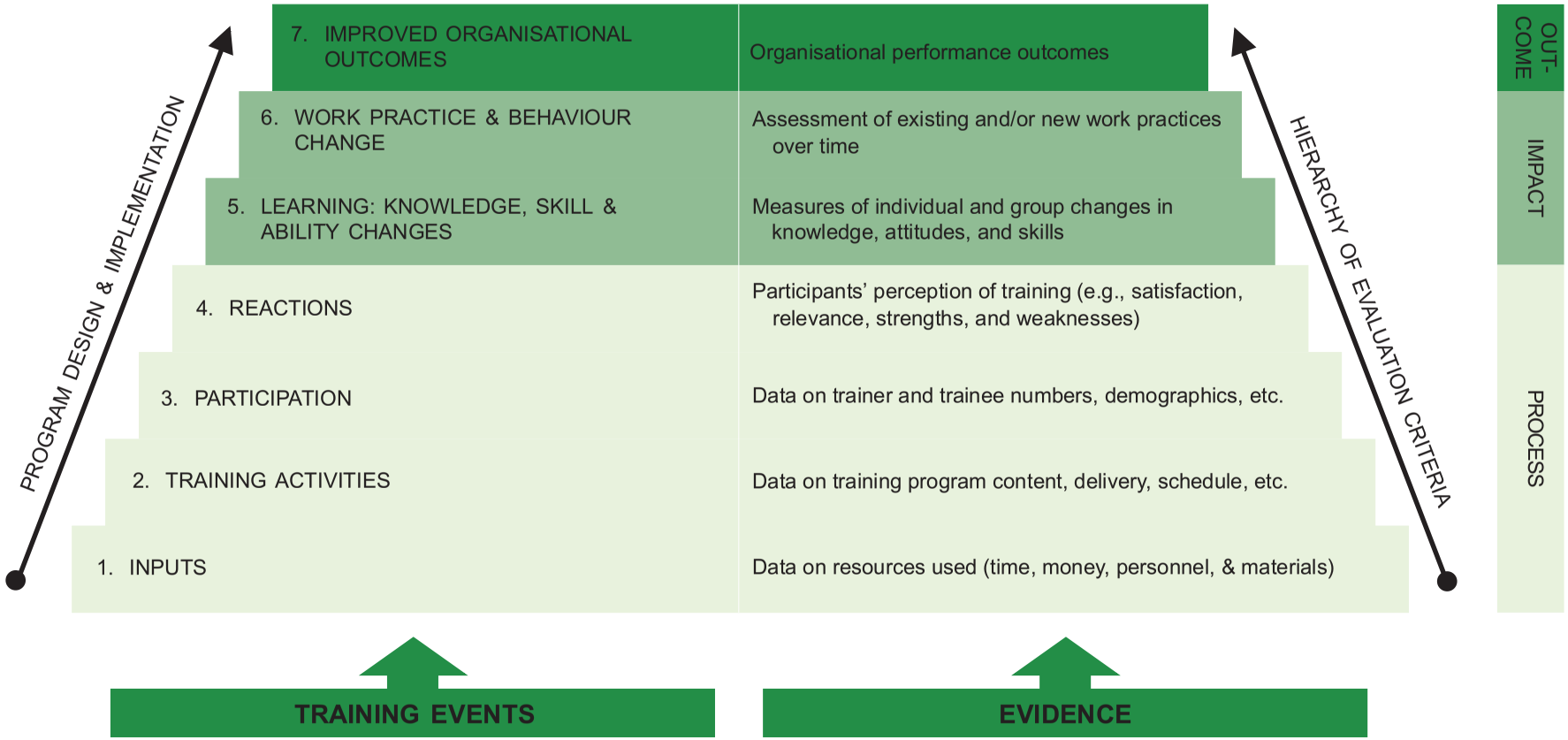

Figure 2.2
Hierarchy of process, impact and outcome evaluation criteria (adapted from Patton, 1997, p. 235).

Recommended Readings

Allsop, S., Cormack, S., Addy, D., Ashenden, R., Ask, A., & Beel, A. (1998). *Education and training programs for frontline professional responding to drug problems in Australia.* [Report to the Department of Health and Family Services, Canberra]. Adelaide, South Australia: National Centre for Education and Training on Addiction (NCETA).

Australian National Training Authority (ANTA). (2001). *Australian Quality Training Framework.* Retrieved October 20, 2003, from http://www.anta.gov.au/tpkQualifications.asp

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Patton, M. Q. (1997). *Utilization-focused evaluation: The new century text* (3rd ed.). Thousand Oaks, CA: Sage.

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CHAPTER 3
TRAINING NEEDS ANALYSIS (TNA)

This chapter provides an overview of the importance of a training needs analysis (TNA) in the context of training evaluations, and identifies strategies to incorporate TNAs into the evaluation process. It is suggested that the reader refer to recommended texts identified at the end of this chapter for more detailed information.

A TNA is a crucial but commonly overlooked step in the design and evaluation of a training program (Goldstein & Ford, 2002). Findings from a TNA can help build a comprehensive picture of how a training program may address the needs of AOD workers, their organisation and ultimately the community they serve. This information can inform the development of the content and delivery of a training program so that it meets the needs of stakeholders (e.g., clients, AOD workers, managers, and funders) (Phillips, 1997).

An effective TNA will establish:

- actual work practices
- desired or optimal work practices
- the gap between actual work practices and desired or optimal practices
- major factors contributing to gaps
- factors to be addressed through training
- training needs that should be given priority in a training program (Holton et al., 2000; Owen & Rogers, 1999).

A trainer's role in undertaking a training needs analysis (TNA) prior to developing and delivering training will depend on:

- whether training needs are pre-determined by an organisation or other stakeholders prior to trainer involvement
- whether the TNA is part of a broader organisational analysis
- time and resources available.

The findings of a TNA should be used to develop the goals and objectives of a training program. Identification of clear goals and objectives for training, in turn, provides the foundation for effective evaluations (Holton et al., 2000b).

A TNA can also ensure that training is the appropriate strategy to address gaps or deficits in AOD work practices. A TNA may identify non-training work performance improvement

strategies (Swanson, 1994). In order to change or improve work performance a range of options may be appropriate including:

1. a training program
2. a training program in conjunction with a range of other strategies such as management training/skills development, mentoring programs, implementation of practice guidelines, or
3. a training program is not the most appropriate method to improve performance, rather some type of environmental or organisational systems change is needed, such as management training/skills development, mentoring programs, implementation of practice guidelines.

Setting up a Training Needs Analysis

Consultation is a key strategy to identify high priority training needs. The level of consultation required will vary depending on who requested the training program and the training program's target participants (e.g., AOD managers and frontline workers from a single agency or community centre, non-specialist health and human services workers from a range of Community Centres).

A comprehensive TNA for AOD education and training may investigate:

- community needs
- organisational factors/requirements
- individual worker's training needs (Hawe et al., 1990; Goldstein & Ford, 2002).

Community needs

It may be appropriate to assess the magnitude of a specific AOD issue within a community in order to determine the demand or priority for the training program requested. A process of consultation and information gathering will ensure that the program addresses AOD training needs of highest priority for a particular service or program (Hawe et al., 1990; NSW Health Department, 2000).

For example, a request could be made to investigate the need for training on safer injecting practices. Consulting with community members and other organisations will lead to a better understanding of the specific AOD problem. The consultation may indicate that injecting drug use is increasing in a particular population (e.g., homeless teenagers). This information could then assist in identifying the target participants for the training program (e.g., youth workers).

For more detailed information on community consultation see Hawe et al. (1990) and South Australian Community Health Research Unit (SACHRU) resources (1994, 1996, 2003).

Organisational factors

To be most effective, a TNA should assess the compatibility of training needs against the organisation's goals and priorities for performance improvement and work practice change. It is recommended that trainers consult with managers and supervisors to obtain their perspective on training needs rather than simply developing a list of training needs based on workers' 'wish lists' (Holton et al., 2000b).

Organisational factors that may influence the implementation of new work practices should also be considered. To successfully translate knowledge and skills obtained from training into work practice, participants need to return to a supportive work environment. For example, some AOD workers may undertake training on the needs of injecting drug users, and then return to a work environment without supervisory support for new interventions, or an organisation that is not conducive to receiving injecting drug users. In such circumstances, the trainee may find it difficult to translate newly acquired knowledge and skills into their work practice.

Individual workers' training needs

An important component of the TNA involves collecting information about the individual workers who may take part in the training program. It is necessary to collect data regarding:

- participants' professional backgrounds
- participants' knowledge, skills and abilities
- previous training experiences relevant to the content of the planned training program.

A training program should be designed to build on participants' existing knowledge, skills and work practices (Wilkins & Elek, 2002; Goldstein & Ford, 2002). The information will also help determine the format and amount of training required.

TNA Data Collection Methods and Tools

There is no single TNA model or method of data collection that can be applied in every situation. Although each TNA is unique, there are some basic questions that can guide the consultation and data collection process. These questions include:

- what are the gaps between actual work practices and optimal work practices?
- what are the causes of the gaps?
- what needs to be taught, or what needs to happen to achieve optimal work performance?
- who are the people that need to be trained?

There are a range of relevant tools that can be used in a TNA. These include:

- surveys of workers, supervisors/managers and other key informants, such as peers and clients
- pre-training tests of workers' knowledge, attitudes, skills, and abilities
- reviews of organisational records and databases
- other sources of data including government reports (Kirkpatrick, 1998; Owen & Rogers, 1999; Phillips, 1997).

Surveys are often the most convenient way to collect TNA information. Questionnaires can be developed that are specific to a particular organisation or target audience. Questionnaires can also provide managers and workers with the opportunity to identify their own training needs and preferred learning strategies, and to make suggestions for improving individual work performances (Kirkpatrick, 1998; Holton et al., 2000a). See Appendix D for examples of TNA tools.

The TNA Findings

An effective TNA will provide information on:

1. Training needs of agreed high priority
2. The target audience for training
3. Facilitators and barriers to the transfer of training in the workplace
4. Training options
5. Alternatives to training to improve work practices.

1. Training needs of agreed high priority

After consultation with key stakeholders, priorities for the improvement of work practices should be clearly identified and training needs prioritised accordingly. At this point it should be determined whether shortcomings in work practices are sufficient to justify designing and implementing a training program, or if resources could be allocated more efficiently in the organisation.

2. The target audience for training

The appropriate target audience (participants) for the training program should be identified, and information collected on the relevant knowledge, skills and abilities to be addressed in the training program.

3. Facilitators and barriers to the transfer of training in the workplace

Consultation with workers, managers, and supervisors should be undertaken to identify facilitators and barriers participants may confront when attempting to apply new knowledge, skills and abilities to their work practice.

4. Training options

A TNA should also provide information on the most appropriate training options. A range of training options should be explored including the development of a tailored training program to address the particular training needs of the target group, and the availability of existing programs (e.g., TAFE courses) that can meet the identified training needs.

5. Alternatives to training to improve work practices

The TNA may reveal that a training program is not likely to be the most effective or appropriate option for improving work practices. Identification of barriers and facilitators to work practice change in the TNA can be used to assess whether training is the most appropriate strategy to bring about the desired practice change. For example, alternative strategies such as mentoring or improved supervision may be more effective in facilitating effective work practices.

Summary

A TNA is a crucial but commonly overlooked step in the design and evaluation of a training program (Goldstein & Ford, 2002). An effective TNA will establish:

- actual work practices
- desired or optimal work practices
- the gap between actual work practices and desired or optimal practices
- major factors contributing to gaps or needs
- factors to addressed through training
- training needs that should be given priority in a training program (Holton et al., 2000a; Owen & Rogers, 1999).

The findings of a TNA should be used to develop the goals and objectives of a training program. Identification of clear goals and objectives for training, in turn, provides the foundation for effective evaluations of training (Holton et al., 2000b).

A comprehensive TNA for AOD education and training may investigate:

- community needs
- organisational factors
- individual worker's training needs (Hawe et al., 1990; Goldstein & Ford, 2002).

There are a range of relevant tools that can be used in a TNA. These include:

- surveys of workers, supervisors/managers and other key informants, such as peers and clients
- pre-training tests of workers' knowledge, attitudes, skills and abilities
- reviews of organisational records and databases
- other sources of data including government reports (Kirkpatrick, 1998; Owen & Rogers, 1999; Phillips, 1997).

An effective TNA will provide information on:

1. training needs of agreed high priority
2. the target audience for training
3. facilitators and barriers to the transfer of training in the workplace
4. training options
5. alternatives to training to improve work practices.

TNA Case Studies

The following case studies provide examples of how a TNA can be undertaken.

Carnegie, J., & Ritter, A. (1996). *A Framework for the analysis of alcohol and drug training needs in the Victorian generalist and specialist health and welfare sectors*. Melbourne, Victoria: Turning Point Alcohol and Drug Centre.

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Recommended Readings

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Hawe, P., Degeling, D. E., & Hall, J. (1990*). Evaluating health promotion: A health worker's guide.* Sydney, New South Wales: MacLennan & Petty.

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CHAPTER 4
THE EVALUATION PLAN

The most effective evaluations are developed during the planning phase of a training program. Opportunities to collect valuable and relevant data about the training will be missed if evaluation planning is left until the end of the training program.

Trainers should clearly identify what an education and training program is aiming to achieve and the strategies that will be used to achieve these aims. Once program goals, objectives and strategies are clearly defined, a good foundation exists for an evaluation plan. An evaluation plan can contribute to the identification and clarification of the goals and outcome measures of a training program (Health Services Division, 2001).

The aims or goals of a training program should be realistic and achievable. The application of SMART principles for goal setting can ensure that program goals and objectives have clear outcomes or indicators that can be evaluated (see Box 4.1).

BOX 4.1: SMART GOALS AND OBJECTIVES ARE:

Specific and clearly defined

Measurable so that change can be assessed

Achievable with realistic outcomes

Relevant to the work roles of participants, and

Timebound with specific time frames set for change and achievements.
(Thackwray, 1997)

Even if the goals, objectives and strategies of a training program have already been determined the outcomes to be evaluated still need to be clearly identified. The rationale for clarifying program goals and objectives is straightforward. An evaluation will be more relevant, meaningful and informative if the evaluator understands what the training program is trying to do and how it intends to do it.

Development of an Evaluation Plan

An evaluation plan will clarify the:

1. The purpose of the evaluation
2. The evaluation resources
3. Training program goals, objectives and strategies
4. Indicators for the training program's goals and objectives
5. The evaluation strategy – level and type of evaluation
6. Evaluation data collection, analysis and interpretation
7. Reporting the evaluation findings and recommendations
   (Health Services Division, 2001; Owen & Rogers, 1999).

The steps involved in the development of an evaluation plan are outlined below. A case study is also provided which describes the delivery of training to health workers who counsel injecting drug users.

1. The purpose of the evaluation

What is the evaluation aiming to achieve?

An evaluation may address a range of issues such as:

- examining the extent to which training has made a difference to participants' work practices
- identifying any changes in knowledge, attitudes and skills as a result of the training
- assessing whether the newly acquired knowledge, attitudes and skills are maintained in the long-term
- improving the content and implementation of a training program
- informing decisions about continuing a current training program
- improving future training programs
- identifying factors that influence the transfer of training to work practice.

2. The evaluation resources

What resources (human, time and financial) are available for the evaluation?

Available resources will determine the type of data collection possible and the range of findings that can be reported. As a rule of thumb, around 10% of a training program budget is often set aside for evaluation costs (Health Services Division, 2001).

An evaluation strategy should be realistic and achievable. Developing a timeline for the evaluation will help to manage resources efficiently and ensure that the evaluation findings are delivered on time.

3. Training program goals, objectives and strategies

What changes to work practice is the training program designed to produce?
What strategies or methods will be implemented to achieve this change?

In order to carry out an effective evaluation, the goals, objectives and strategies of a training program should be clearly identified and the program assessed against these specific criteria.

Goals

A goal is the long-term aim or outcome of a training program. The evaluation plan should clarify the specific performance outcomes that would indicate progress towards the training goal (e.g., all new clients screened for high risk alcohol consumption patterns). If specific performance outcomes for a goal cannot be identified then the training goal may need to be reconsidered (Holton et al., 2000b).

CASE STUDY: TRAINING GOAL

To increase health workers' ability to provide appropriate services and up-to-date information to injecting drug users, to facilitate safer injecting practices.

Objectives

An objective refers to the changes that participants are expected to implement in order to achieve a particular training goal. An objective often includes 'action' words such as 'to increase' or 'to improve'.

Objectives are statements about the changes participants will make as a result of the training program, such as '*to increase knowledge and skill levels*' or '*to change trainees' attitudes*'.

A training program can have a hierarchy of objectives or specific changes that contribute to the achievement of long-term goals. The objectives can be set at different levels. For example:

- *End-of-program objectives* define what learning should occur (impact evaluation)
- *On-the-job objectives* define behaviour changes in participants' work practices over specific time periods (e.g., 1 month and 6 months post-training) (outcome evaluation).

CASE STUDY: TRAINING OBJECTIVES

- To increase health workers' knowledge of safer injecting practices and blood-borne viruses.
- To increase health workers' understanding of issues that are relevant to intravenous drug users regarding safer injecting practices and blood-borne viruses.
- To increase the confidence of health care workers to provide appropriate services to injecting drug users.

Strategies

Program strategies are the activities or processes implemented to facilitate the development of participants' knowledge skills and abilities. Evaluation at this level examines:

- what was done in the training
- who and how many people attended
- the quality of the training program
- participants' perceptions of training (Parry, 1997; SACHRU, 2003).

It is important to distinguish between program strategies and objectives when planning an evaluation. It would be easy to conclude that a training program was successful in meeting its objectives on the basis that the program was implemented. However, this approach does not assess whether training resulted in the desired work practice change.

CASE STUDY: TRAINING STRATEGIES

Target 100 health care workers.

Run a series of one-day workshops that provide:

- information about safer injecting practices
- opportunities for participatory learning about safer injecting practices
- information on blood borne viruses, particularly hepatitis C
- opportunities for discussion on important issues for injecting drug users.

4. Indicators for the training program's goals and objectives

Indicators can be used to describe changes in behaviour, attitudes, knowledge and skills that can be measured or assessed. An evaluation plan should specify the indicators that training will be assessed against, specifically the changes or outcomes that indicate that the training has achieved the stated goals and objectives of the program (Health Services, 2001: SACHRU, 2003).

5. The evaluation strategy – level and type of evaluation

After establishing the training program goals, objectives and indicators, the next step is to determine an evaluation strategy and develop appropriate data collection methods.

At an early stage in planning the training program, decisions will need to be made regarding the *who*, *where* and *when* of evaluation (Phillips, 1997). This process of questioning can help to establish a structure for the evaluation (Health Services, 2001).

In designing an evaluation strategy consideration needs to be the most appropriate type and level of evaluation. As discussed in Chapter 2, evaluation can be undertaken at four levels:

1. Reaction of participants
2. Learning
3. Behaviour on-the-job
4. Results (long-term impacts) of the training (Kirkpatrick, 1998).

Evaluation can be undertaken at different stages of training. Three types of training evaluation can be distinguished on this basis: process, impact and outcome evaluations.

It is important to be clear about the level of evaluation you will be addressing. Process and impact evaluations (i.e., Levels 1 and 2) may be easier to conduct. Long-term outcome evaluation could be more difficult due to resource constraints. However, there are now standardised measurement tools available such as the Work Practice Questionnaire (WPQ; see Appendix J) that could be administered to trainees at relatively low cost after they have returned to their workplace.

From whom should evaluation information be collected?

Evaluation information can be collected from participants, supervisors/managers, team members, subordinates or a combination of these groups.

Where should evaluations occur?

Evaluations can be conducted at the training site, in the workplace or a combination of both.

When should the evaluation be conducted?

The question of timing of the evaluations requires careful thought and planning. Evaluation can occur at different stages of the training program. Depending on the purpose and budget of the evaluation, data can be collected:

- before the training program starts, to collect baseline data for comparison of pre- and post-training levels of knowledge, attitudes and skills
- during the training, to collect data on participants' reactions and measure learning
- at the end of the program to gather data on participants' reactions and measure learning
- after the completion of training when participants have returned to their workplace. Information can be collected on the capacity of participants to transfer training into their work practices. Factors that assist or hinder training transfer can also be identified
- at a later date (e.g., 1 month, 6, or 12 months) after participants have returned to their workplace, to assess the longer-term impact of the training program and participants' maintenance of work practice change.

A sample training and evaluation plan for our case study illustration is provided in Table 4.1 below. A template for a training and evaluation plan is provided in Appendix E.

6. Evaluation data collection, analysis and interpretation

A range of quantitative and qualitative methods can be used for data collection and analysis including questionnaires, interviews and focus groups. Table 4.1 indicates some data collection methods appropriate for the case study on health workers' training. Chapter 5 contains detailed information on data collection. Guidelines on questionnaire development are provided in Chapter 6. Methods of data analysis and interpretation are reviewed in Chapter 7.

7. Reporting the evaluation findings and recommendations

The findings of a training evaluation should be reported back to program funders, organisations and other key stakeholders. Chapter 8 outlines key issues to be considered in the production of training evaluation reports.

The key stages in training evaluations are summarised in Table 4.2.

Table 4.1
Training and Evaluation Plan

GOAL: Increase health workers' ability to provide appropriate services and up-to-date information to injecting drug users to improve their injecting practices.	**INDICATORS:** The organisation will be recognised as having expertise and current information that will help injecting drug users. Changes in participants' work practices maintained over a long-term period. Fewer complaints from injecting drug users about service quality.	**OUTCOME DATA COLLECTION METHODS:** Interviews with key stakeholders and community representatives. A measure of work practices and any changes, such as the WPQ or diary. Organisational records of complaints.
OBJECTIVES: To increase health workers' knowledge of safer injecting practices and bloodborne viruses. To increase health workers' understanding of issues that are relevant to intravenous drug users regarding safer injecting practices and bloodborne viruses. To increase the confidence of health care workers in their ability to provide appropriate services to injecting drug users.	**INDICATORS:** Participants will demonstrate on pre-post training test comparisons: • improved knowledge of safer injecting practices and bloodborne viruses • improved understanding of the issues involved in safer injecting • increased confidence in talking to drug users about safer injecting and bloodborne viruses.	**IMPACT DATA COLLECTION METHODS:** Pre- and post-training tests on trainees' levels of knowledge, skills, and attitudes. Interviews. Focus groups. A measure of work practices and any changes, such as the WPQ or diaries.
STRATEGIES: Target 100 health care workers and run a series of 1-day workshops that provide: • information about safer injecting practices • opportunities for participatory learning about safer injecting practices • information on bloodborne viruses, particularly hepatitis C • opportunities for discussion of important issues for injecting drug users.	**INDICATORS:** An education and training officer, a former user and a person with a bloodborne virus delivered a series of 1-day workshop (one 6-hour session) to five groups of 20 health care workers at their workplaces. The program used participatory learning methods and provided opportunities for discussions.	**PROCESS DATA COLLECTION METHODS:** Records of attendance. Questionnaires such as reaction sheets.

Note. Adapted from SACHRU, 2003.

Table 4.2
Key Stages in Training and Evaluation

TRAINING	EVALUATION
Planning for Training Confirm available resources (financial, human, and time factors) Allocate a budget for the evaluation of training Conduct a training needs analysis to: • identify training needs • measure current knowledge, skills, and abilities of participants • determine current competencies of participants.	*Planning the Evaluation* Clarify the purpose of the evaluation Determine evaluation focus and strategies according to available resources Record pre-training levels of knowledge, skills, and abilities for comparison with post-training measures.
Designing the Training Program • specify desired objectives, goals and outcomes of the training program • identify resource needs • develop training content, resources, and strategies, according to identified needs and available resources	*Designing the Evaluation* • identify indicators of successful achievement of the training objectives, goals and outcomes • determine criteria to be used to assess the achievement of these indicators • identify measurement tools that directly link to the program strategies, objectives, goals, and outcomes.
Delivery of Training Implement training strategies, content, and resources.	*Evaluation Data Collection* Collect evaluation data during and after training Process evaluation can measure and assess: • the implementation of the training strategies, content and resources • participants' reactions to the training.
Assessment Determine individual participant's achievements by assessing: • knowledge, skills, and abilities developed during the training • competencies achieved • work practices at an appropriate point in time after training has been completed.	*Evaluation Data Collection* • Impact evaluation can: measure and assess the indicators of successful achievement of training program objectives and goals • compare pre- and post-training measurements of knowledge, attitudes, skills, and competencies Outcome evaluation can: • measure and assess changes in participants' work practices • identify factors that may influence the transfer of knowledge and skills developed during training to work practice.
	Data Analysis and Interpretation Analyse and interpret data to identify strengths and weaknesses of the training program as they relate to achievement of the program goals.
Training Modify training programs in response to the evaluation findings and recommendation.	*Reporting* Present the evaluation findings and recommendations to key stakeholders in a clear report format and timely manner.

Note. Adapted from Health Services Division, 2001; Kemmis, 1994; Owen & Rogers, 1999.

Recommended Readings

Hawe, P., Degeling, D. E., & Hall, J. (1990*). Evaluating health promotion: A health worker's guide.* Sydney, New South Wales: MacLennan & Petty.

Health Services Division. (2001). *Evaluation: A guide for good practice*. Canberra, Australian Capital Territory: Commonwealth Department of Health and Aged Care. Retrieved January 8, 2003, from http://www.mentalhealth.gov.au/resources/evaluation.htm

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CHAPTER 5
DATA COLLECTION

The evaluation of an education and training program involves the systematic collection of data about the various training activities and also the short- and long-term outcomes of the training.

There are basically two types of data collection methods:

- *Quantitative* methods which use standardised approaches to count *how many* or *how much*
- *Qualitative* methods which are descriptive and ask questions that begin with *who*, *which*, *what*, *when, where* and *why* (Patton, 2002).

Choices between the two types of data collection methods are largely dependent on the type of questions the evaluation is addressing and the resources available.

Quantitative Data

Quantitative data refers to information that can be assigned a numerical value and can be collected through surveys, tests and counts. Quantitative data provides a count of occurrences. Analysis of quantitative data can range from a simple count of items to complex statistical tests. Quantitative methods have the potential to collect data from a large number of people however this type of information can lack explanatory detail (de Vaus, 2002).

Qualitative Data

Qualitative data is colleted in the form of words in a written or verbal format. It can be collected using observation, interviews, focus groups, open-ended survey questions and document analysis (Patton, 2002; Phillips, 1997; Wadsworth, 1997). The information collected by qualitative techniques may reveal unintended or unexpected outcomes of a program. The use of quantitative methods requires careful planning, as qualitative data analysis can be time consuming (Rice & Ezzy, 1999).

Triangulation

If available resources permit, it is often preferable to use both qualitative and quantitative methods of data collection and then synthesise findings from both methods. This process is called triangulation. It can 'value-add' to an evaluation, as data from one methodological

approach can be used to supplement and validate data from the other (Denzin & Lincoln, 2000).

Ideally, a comprehensive evaluation incorporates both qualitative and qualitative data collection methods. For example, an evaluation of peer AOD education could assess changes in knowledge, confidence and attitudes through quantitative methods (such as surveys) and gather further information about participants' experiences through qualitative approaches such as interviews or focus groups (McDonald et al., 2003).

Data Collection Methods

There are a wide range of quantitative and qualitative data collection methodologies from which to chose. Some of these are outlined below. Appendix F outlines a range of quantitative and qualitative data collection methods in more detail.

Quantitative data collection methods

Surveys are a common method of quantitative data collection. Surveys can be administered in a variety of ways including face-to-face or telephone interviews, or self-administered questionnaires. Chapter 6 outlines techniques for survey and questionnaire design and development.

Other features of quantitative data collection include:

- large data sets (e.g., National Drug Strategy surveys)
- standardised tests (useful for comparison with other evaluations and programs)
- process tracking forms and records (e.g., AOD agency client lists).

Qualitative data collection methods

Common approaches to qualitative data collection include:

- interviews
- focus groups
- observations
- diaries and log books.

These qualitative methods are briefly described below.

Interviews

Interviews can be used to collect information that is difficult to obtain through written responses, performance records or observations. Interviews can be structured or unstructured. In a structured interview the same set of questions are asked of each participant in the same order. In an unstructured interview a set of general questions may be developed as a starting point and as a guide to the topics the interviewer wishes to address. However,

the interview is allowed to proceed in manner similar to an everyday conversation (Phillips, 1997; Wadsworth, 1997; Patton, 2002).

Focus groups

A focus group is a small group discussion conducted by a facilitator. It is designed to gain in-depth information on a particular topic or issue (e.g., the impact of training on work practice) (Krueger, 1994; Morgan & Krueger, 1998; Phillips, 1997; Wadsworth, 1997). Focus group discussion is flexible, and this flexibility makes it possible to explore the unintended outcomes of a training program.

Observations

Participants' work practices can be observed to assess changes in behaviour after training. The observer can be a supervisor, a peer worker or an outside party such as the trainer. Observers must be well prepared in order to collect the most effective and appropriate evaluation information. The observation process should be planned so that the person to be observed knows in advance about the observation and why they are being observed. A range of observation methods can be used, including simulated assessments, a work practice behaviour checklist, video recording or audio monitoring (Booth et al., 2002; Phillips, 1997; Wadsworth, 1997).

Diaries and logbooks

Workers can be asked to record their work practices in a diary or logbook. These records can then be analysed to identify changes in work practices (Phillips, 1997; Wadsworth, 1997).

Baseline Data

Baseline data on participants can be collected before training occurs. For example, such data can be collected during a training needs analysis or a pre-training test. This information will enable a comparison between workers' knowledge, attitude and skill levels and workplace behaviour before they receive the training and after the training program has been completed. A pre-post training test is a straight forward way to make this comparison.

It is recommended that evaluation programs include the collection pre- and post-training data in order to measure the degree of change in participants' knowledge, skills and abilities that is associated with training.

Pilot Testing

Pilot testing is a small, preliminary test or trial run of a data collection instrument or procedure. Pilot testing provides an opportunity to identify any potential difficulties with the content or administration of a measurement tool. To maximise the quality of data obtained from an evaluation measurement tool, pilot testing is recommended for qualitative and quantitative data collection methods.

Prior to the pilot testing (i.e. pre-pilot) a small group of people such as colleagues or potential trainees can be asked to complete the pilot evaluation measurement tool, such as a questionnaire. This consultation can provide feedback on instructions and questions and enable modifications to be made to the data collection tool.

The information collected during pilot testing can also be used to trial data management and data analysis methods. A trial run of the data analysis will identify whether the measurement tools are going to produce appropriate evaluation data (Hawe et al., 1990).

Choosing an Evaluation Measurement Tool

In deciding whether to use an existing measurement tool or create a new tool specific to a training program the following points should be considered:

1. **Availability of existing measurement tools** – check the availability of existing measurement tools and their terms of use (some instruments require copyright payments)
2. **Ease of use and low burden** – select or develop evaluation tools that are easy to use by the person collecting the data and training participants
3. **Appropriateness of the data collection method** – choose an instrument appropriate to the type of data to be collected. For example, an interview, rather than written survey, may be a more effective approach for collecting detailed data about participants' perceptions of training
4. **Resources for analysis** – administering a survey to a large number of individuals is worthwhile only if resources are available to manage and analyse a large data set. In some circumstances a more effective and efficient strategy to meet evaluation program goals and objectives is to collect detailed information from a smaller group of participants. Data collection and analysis can take a significant amount of time that needs to be factored into a training program and budget
5. **Acceptance by participants** – consider the participants when determining the most suitable instruments or methods. Particular training groups may have special needs, for example Indigenous people and participants from culturally and linguistically diverse (CALD) communities.

As noted earlier there is no single, all-purpose tool for AOD training evaluation. AOD training can cover a diverse range of knowledge, skills, attitudes and behaviours. Particular training programs may require specific types of measurement and assessment. The more specific a measurement tool is to the training program, the more likely it will provide high quality and useful evaluation data.

Table 5.1 provides an overview of various measurement tools that can be used to assess training outcomes related to knowledge, attitude, skill, and behaviours change.

Table 5.1
Training Evaluation Measurement Tools

Training outcome to be evaluated	MEASUREMENT TOOLS	
	Direct measures	Less direct measures
Knowledge	Tests Skills assessment Observation Program-specific questionnaire	Self-report questionnaire, interview, logbook, or journal
Attitudes	Questionnaire developed for the program Standardised test of attitudes	Self-report of changed attitudes (from interview, focus groups, questionnaire, or journal)
Skills	Role play Job or task simulation Case study analysis	Self-report of skill levels
Behaviour	Observation Diaries Log books	Self-report of behaviour change (questionnaire, interview, diary, focus group) Peers' and/or supervisors' reports of behaviour

Note. Adapted from Booth et al., 2002; Hawe et al., 1990; Phillips, 1997.

Surveys are an efficient and effective data collection method for evaluation purposes. The following chapter outlines basic aspects of survey and questionnaire design.

Recommended Readings

Booth, R., Clayton, B., House, R., & Roy, S. (2002). *Maximising confidence in assessment decision-making*. Adelaide, South Australia: National Centre for Vocational Education Research (NCVER).

De Vaus, D. A. (2002) *Surveys in social research* (5th ed.). St Leonards, New South Wales: Allen & Unwin.

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CHAPTER 6
SURVEY AND QUESTIONNAIRE DESIGN

Surveys and questionnaires are data collection methods commonly used to evaluate training programs.

There are three main types of survey methods:

- face-to-face interviews
- telephone interviews
- self-report questionnaires (SACHRU, 1994).

The evaluation of an AOD training program could incorporate an existing survey tool (such as the Work Practice Questionnaire [WPQ]), or a questionnaire can be specifically developed for the program evaluation. Sample questions for a pre- and post-training evaluation questionnaires are illustrated in this chapter. A sample questionnaire is attached in Appendix G.

Questionnaire Design

Careful thought should be given to the design of the questions so that the most relevant and valid data can be collected about the training program. The development of a questionnaire involves:

1. Identifying the information required
2. Developing appropriate questions
3. Designing response formats
4. Formatting the questionnaire
5. Pilot testing the questionnaire
6. Developing strategies to maximise the response rate
   (Dillman, 2000; Fink & Kosecoff, 1998; Phillips, 1997).

1. Identifying the information required

The first step in questionnaire design is to specify the type of information required. Think about the desired outcomes specified for the training program. Key issues include:

- changes in knowledge, abilities skills and behaviours that need to be measured in order to indicate progress towards the desired training outcomes
- information required about participants (e.g., demographics, education).

2. Developing appropriate questions

The clarity and structure of questions can influence participants' responses. Keep the wording as simple, clear and unambiguous as possible.

Choose questions that will be acceptable and comprehensible to participants. Ask questions that participants can respond to accurately. Ask sensitive questions only when necessary and choose the wording carefully. Table 6.1 highlights some key issues regarding question clarity that should be considered in questionnaire design.

Table 6.1
Questionnaire Design Issues

QUESTION DESIGN ISSUES	EXAMPLES OF WHAT NOT TO DO
Technical language or street jargon may not be acceptable.	How many times a day would your client wack whizz up their arm?
Use language that participants understand and eliminate extra words.	The sub-cubital fossa is the most common injecting site for drug users.
Avoid 'double-barrelled' questions.	Do you consider that information about safer injecting is an effective and appropriate way to reduce drug related harms and improve the health of injecting drug users?
Avoid biased and value-laden words or phrases.	List 4 bad things about injecting drug use.

3. Designing response formats

Survey questions can be designed to record responses that are:

- open-ended
- close-ended, or
- scaled.

Open-ended questions

Open-ended questions provide participants with the opportunity to respond in their own words. These kinds of questions will not usually generate quantitative data (i.e., data that can be analysed statistically). Data derived from open-ended questions is usually analysed using qualitative techniques such as mapping common themes in participants' responses.

Careful analysis of open-ended questions requires considerable time, especially if there are more than eight to ten participants in the training group. Box 6.1 provides an example of an open-ended question.

BOX 6.1: EXAMPLE OPEN-ENDED QUESTION

What basic information should an injecting drug user have about safer injecting practices?

Close-ended questions

Close-ended questions provide a range of possible answers from which the participant can select a response. Close-ended questions in pre- and post-training tests can be used to assess changes in knowledge, skills and abilities.

It is important to note that these types of questions assume that the range of answers offered to participants is appropriate and adequate. (Yes/No format questions and multiple choice questions are examples of closed questions.)

Closed questions lend themselves to relatively quick data analysis, especially if the questionnaire is carefully constructed to ensure that answers can be easily coded and transferred to a database. Box 6.2 provides an example of a close-ended question.

BOX 6.2: EXAMPLE CLOSE-ENDED QUESTION

What age group are you in?

- ❒ < 20
- ❒ 20-30
- ❒ 31-40
- ❒ 41-50
- ❒ > 50

Scaled questions

Scaled questions are a specific type of close-ended question in which respondents indicate their views on certain issues by choosing from a continuum of responses (e.g., *strongly agree*, *agree*, *undecided*, *disagree*, *and strongly disagree*).

Data derived from questions or statements in this kind of format can be useful when evaluating attitudes or perceptions of attributes such as confidence or competence. An example of a scaled question is provided in Box 6.3.

BOX 6.3: EXAMPLE SCALED QUESTION

How confident do you feel providing information about safer injecting practices to:

A young person who hasn't injected before, but is thinking of doing so.

1	2	3	4	5
Not at all confident		Confident		Very confident

A person who has been injecting for many years.

1	2	3	4	5
Not at all confident		Confident		Very confident

Table 6.2 below provides an overview of content areas and response formats commonly used in training evaluation questionnaires.

Table 6.2
Evaluation Questionnaire Content Area and Response Formats

CONTENT AREA	RESPONSE FORMATS
Knowledge	True/false Correct/incorrect Accurate/inaccurate
Attitudes Participant's values and opinions	Favour/oppose Prefer/don't prefer Should/shouldn't Desirable/not desirable
Behaviour in the work place	What have you done in the past? What are you doing currently? What do you plan to do in the future? In what way have your work practices changed in relation to XXX?
Participant characteristics Demographic information	Age Gender Education Work role, etc.

Note. Adapted from Hawe et al., 1990; SACHRU, 1994.

4. Formatting the questionnaire

A well designed and formatted questionnaire will increase the likelihood of participants answering all questions with speed and accuracy. Key elements in the formatting of a questionnaire include:

- layout
- title
- introductory statement
- instructions
- questions.

These key elements are briefly discussed below. A sample questionnaire is provided in Appendix G.

Layout

The layout of a questionnaire can influence the response rate. To optimise response rates:

- use a font that is easy to read (e.g., Arial)
- keep the questions and answer options together on the same line or adjacent to each other
- allow enough space for participants to write when using open-ended questions (i.e., don't crowd questions together)
- use graphics if appropriate
- allow space for comments and suggestions.

Title

Use a clear concise title that reflects the content of the questionnaire.

Introductory statement

Include information about the purpose of the questionnaire, confidentiality, anonymity, how the data will be used and details of who is collecting/authorising it.

Instructions

Give explicit and precise instructions about how to fill out the questionnaire, including where and when to return it. Different types of questions may also need specific instructions. For example, a series of closed questions could require the person completing the questionnaire to tick a box or circle an answer.

Questions

A combination of open- and close-ended questions can be used. When considering the order in which to place questions, apply the following principles:

- start with easy to answer, non-threatening questions
- group questions into sections related by topic or issue
- in quantitative questionnaires, keep open-ended questions to a minimum and place them at the end of a section of the questionnaire.

Demographic information

Demographic questions seek information about the participants and their background. Only ask questions that are relevant to the purposes of the training and evaluation. Do not waste participants' time on questions that will not provide relevant evaluation information.

5. Pilot testing the questionnaire

Pilot testing the questionnaire is important to ensure that any potential difficulties or errors with the questionnaire are identified before implementation. Pilot testing is a critical stage of questionnaire development. Evaluation can be a frustrating and costly exercise if the questionnaire findings reveal that participants:

- misunderstood the questions
- could not follow the directions
- provided irrelevant answers to questions, or
- could not complete the questionnaire in the time provided.

A useful first step in pilot testing is to ask four or five colleagues to fill out the questionnaire and provide feedback (a pre-pilot). A pilot test should then be conducted with a small group of people who closely match participants in the training program in terms of their work activities, skills and knowledge. Feedback from the pilot can then be used to guide any modifications to the questionnaire. If there is time, the modified version can also be tested.

Table 6.3 contains sample questions that can be used to collect feedback during the pilot testing of a questionnaire.

Table 6.3
Pilot Testing Questions

OVERALL QUESTIONS	INDIVIDUAL QUESTIONS	LOGISTICAL QUESTIONS
What do you think this questionnaire is about?	Do you think participants will understand how to answer this question?	Are the directions clear?
What problems, if any, did you have completing the questionnaire?	Do you think there is any language in the questionnaire that is ambiguous, confusing, or may be offensive?	Was it clear how to return the questionnaire?
How do you think the information will be used?	Do you think participants will find any of the questions too sensitive?	How long did it take to complete the questionnaire?

6. Developing strategies to maximise the response rate

A range of strategies can be used to maximise the questionnaire response rate including:

- allowing for anonymous responses
- keeping the questions brief and concise
- simplifying the return process by providing a self-addressed stamped envelope or a response box in the work place

- offering incentives for a quick response
- providing advanced notice of the requirement for participants to complete a questionnaire at the training program
- sending follow-up reminders a few weeks after the questionnaire has been distributed
- encouraging management to support participants' completion of the questionnaire. (Dillman, 2000; Fink & Kosecoff, 1998).

Recommended Readings

Dillman, D. A. (2000). *Mail and Internet surveys: The tailored design method* (2nd ed.). New York: Wiley.

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CHAPTER 7
DATA ANALYSIS AND INTERPRETATION

Data analysis and interpretation should be considered at the start of the questionnaire design and data collection process. It is important to identify the most appropriate data analysis method for each question(s), and to ensure that a question provides clear and unambiguous information. Conducting a pilot data analysis, as part of the pilot testing procedure, is recommended.

A sample questionnaire with a range of open- and close-ended questions and data analysis methods is attached in Appendix G.

There are several steps that need to be undertaken to prepare data for analysis and ensure the analysis is as accurate and unbiased as possible. These steps can be applied to both qualitative and quantitative data analysis, as outlined below. This section starts with issues relevant to quantitative surveys.

Steps in Data Analysis

1. Develop a data analysis plan
2. Organise, code, and 'clean' data (quantitative data)
3. Analyse quantitative data
4. Code and classify qualitative data
5. Interpret findings.

Each step is described in more detail below, and key steps are summarised in Table 7.2 at the end of this chapter.

1. Develop a data analysis plan

A systematic way to start the process of data analysis is to develop a Data Analysis Plan. This plan will outline, for example, the ways in which the responses to survey questions (quantitative and/or qualitative) will be analysed. Different types of questions will require different methods of analysis. The appropriate analyses will depend on the purpose of the evaluation and the information key stakeholders require. Table 7.1 outlines some common data analysis methods.

Table 7.1
Basic Data Analysis Methods

DATA	DATA ANALYSIS METHODS
Quantitative	• calculation of mean scores, frequency of responses and/or percentages of responses • calculation of individual scores and the mean score for all respondents. • comparison of pre- and post-training scores
Qualitative	• content analysis to identify common themes • frequency counts of similar answers to specific questions.

The appropriate data analysis technique(s) should be identified early, ideally during the questionnaire design stage. It is worthwhile making a systematic record of the data analysis methods for each question in the survey. Appendix G provides a sample questionnaire and a data analysis plan.

2. Organise, code and 'clean' data (quantitative data)

Coding

Coding is the process of assigning numbers to quantitative data responses in order to conduct calculations and statistical analysis such as frequencies, percentages and means (averages).

A codebook should be set up to systematically record all decisions made about coding. A well-designed codebook will enable other people to understand and possibly replicate the data coding and analysis. Each response to each question will receive a code (usually in the form of a number). The convention in data analysis is to assign missing data the number 9 or a combination of 9s (e.g., 99 or 999). The rule for handling missing data should be recorded in the codebook.

Key coding items that should be recorded are:

1. The question
2. The name of the characteristic or variable being measured or assessed (often abbreviated)
3. A list of valid codes for each response to a question (e.g., 1 = *yes*, 2 = *no*)
4. A code for missing data (e.g., 9, 99, 999)
5. A list of special coding instructions used for coding particular questions.

Questionnaires sometimes have missing responses to some questions. These questionnaires can still be included in the data analysis. The analysis of missing data can often highlight unintended effects of a program.

Box 7.1 provides an example of a codebook entry.

BOX 7.1: SAMPLE CODEBOOK ENTRY: MULTIPLE-CHOICE QUESTION

1. Question 1. Which of the factors listed below is NOT a transmission risk for hepatitis C?
2. **Variable name**: Knowledge of transmission risk factors abbreviated to RISKFACTS.
3. **Valid response codes**: 1 = *imprisonment*, 2 = *intravenous drug use*, 3 = *sharing eating utensils (e.g., plates)*, 4 = *body piercing & tattooing*, 5 = *pre-1990 blood transfusion.*
4. **Missing data** = 9.
5. **Special instructions**: Response 3 is the correct answer.

Data will need to be 'cleaned' prior to analysis to remove unsuitable data. A record should be kept of the number of questionnaires that were not suitable for analysis and the reasons they were not suitable (e.g., some questionnaires may be only partially completed or unreadable). Keeping track of the number of questionnaires distributed and returned will also allow calculation of a response rate.

An identification number is then assigned to each questionnaire form that will be used in the data analysis. This will allow for checking of any unusual or inconsistent responses that may be noticed during data analysis.

An example of codebook entries and data entry is provided in Appendix G.

Multiple data collection points (e.g., pre- and post-training)

In the case of pre- and post-training surveys records will need to kept of which participants have completed questionnaires in each round of survey administration. Asking participants to provide a unique personal identification code will allow responses to be tracked over time whilst maintaining participant anonymity (e.g., first four letters of mother's maiden name and last two digits of year of birth). When comparing diary entries or test responses across two (pre-test to post-test) or three (pre-, post- and follow-up) time periods, the final data set would usually contain data only from participants who completed their responses for every time period.

3. Analyse quantitative data

Descriptive statistics are the most common methods of data analysis used with quantitative data. They include:

- frequency counts
- percentages or proportions
- means (averages).

Descriptive statistics can be presented as tables and graphs to highlight response patterns.

*A **frequency*** counts how often a particular answer was selected.

*A **percentage*** indicates the proportion of respondents who selected a particular answer. Each percentage is calculated by dividing the frequency of each response by the total number of responses and multiplying the result by 100. Percentages should add up to 100, but if the calculation has been 'rounded' up or down, the total may be slightly higher or lower than 100.

*A **mean*** is the average response to a given question or set of related questions (e.g., participants' average age or average number of years of schooling). A mean can be used to describe an individual's aggregated score or the group response as a whole.

Prior to quantitative data analysis it is worth checking for 'outliers', that is when a few atypical responses fall well outside the range of responses. In some instances, it is advisable not to include outliers in estimates of averages (or other calculations), because they can distort the aggregated findings. For this reason, outliers are sometimes deleted from some analyses which are attempting to establish 'means' or average scores. Deletion of outliers should be reported.

Descriptive statistics are the basis for more advanced statistical analysis methods, including correlations, differences between groups and changes over time. These types of quantitative data analyses are best done with computer packages such as SPSS. If you are unfamiliar with data analysis and need to use more sophisticated forms of analysis, then it is best to consult an expert in statistical analysis.

4. Code and classify qualitative data

Coding

Qualitative data can be collected through a range of methods such as interviews, focus groups, diaries or open-ended questions. This type of data is coded in very different ways to quantitative data (Lofland & Lofland, 1995; Patton, 2002; Phillips, 1997; Wadsworth, 1997).

When coding qualitative data participants' responses are organised into categories that represent particular themes or topics. The purpose of analysis is to reduce the amount of text and organise responses into identifiable themes and issues.

Qualitative data can be analysed manually. The responses to a single question can be copied and pasted onto the same page for analysis (Miles & Huberman, 1994; SACHRU, 1996). Software packages are available for qualitative data analysis, such as Ethnograph (Seidel et al., 1998), NUD*IST (Qualitative Solutions and Research, 1997) and NVivo (Bazeley & Richards, 2000).

Decide on the 'unit of analysis'

A unit of analysis can be words, sentences, concepts, a theme, or all responses to a specific question. An example of responses to an open-ended question and the unit of analysis is

provided in Boxes 7.2 and 7.3. The unit of analysis in this example is the sentences constructed by participants in their response to the question.

Box 7.2 provides an example of qualitative data collected in responses to an open-ended question. The 'unit of analysis' of this data is the concept 'information needs of injecting drug users'.

Box 7.3 lists the different information needs identified in the qualitative data.

BOX 7.2: EXAMPLE OPEN-ENDED QUESTION AND PARTICIPANTS' RESPONSES

Question:
What basic information should an injecting drug user have about safer injecting practices?

PARTICIPANT ID	RESPONSES
ID No. 7	*"I think that you should not make any assumptions about an IDU's level of knowledge and that you should give each user, where and when appropriate, basic information about how bloodborne viruses (BBVs) can be transmitted, safer injecting spots and good techniques, and I think they should also have information about things like who to call if they get into difficulties."*
ID No. 2:	*"The best information anyone can give to a user is to stop using today"*
ID No. 10:	*"Drug users need information about needle exchanges. Other ways to use drugs, not injecting should also be talked about with them."*

BOX 7.3: EXAMPLE UNIT OF ANALYSIS
(information needs of injecting drug users)

Tell them to stop using today
Needle exchanges
Other ways to use
How BBVs are transmitted
Injecting spots (i.e., where to inject)
Injecting techniques
Where to get help

Classify the data

After deciding on the unit of analysis, response categories or classes can then be developed. Reading and re-reading the data will help to identify patterns or themes. Each data unit should be classified and placed into a response category. Classifying the data helps to reduce the volume of the text without losing the information. As the data analysis continues, the categories may need to be revised. Box 7.4 provides an example of qualitative data classification.

BOX 7.4: EXAMPLE QUALITATIVE DATA CLASSIFICATION

UNIT OF ANALYSIS (information needs of injecting drug users)	**CLASSIFICATION**
Tell then to stop using today	Alternatives to injecting
Needle exchanges	Resources/information
Other ways to use	Alternatives to injecting
How BBVs are transmitted	Safer injecting information
Injecting spots (i.e., where to inject)	Safer injecting techniques
Injecting techniques	Safer injecting technique
Where to get help	Resources/information

Data analysis

After classification of the qualitative data into themes, a count can be conducted of the number of responses in each category. To simplify reporting, composite responses can be created that are representative of the content of all responses in a particular category.

A short interpretive paragraph can be written describing the contents of each response category. Quotes from participants can also be used to reinforce a finding. A sample interpretation is provided in Box 7.5.

BOX 7.5: EXAMPLE QUALITATIVE DATA INTERPRETATION

"Participants' responses to this question fell into several major categories and a number of sub-categories. Seventy percent of participants identified as important at least one issue concerning safer injecting practices. The most frequently reported sub-category was information about BBVs. Alternatives to injecting were identified by 50% of participants. Only two participants identified abstinence as an alternative to injecting, with the majority of participants identifying non-injecting routes of administration as the most important type of information for users to have. Unexpectedly, resources were identified by only 20% of participants as important information for users to have."

5. Interpret findings

Once the data have been analysed it is important to examine all the available information (quantitative and qualitative) to get a full picture of the training program.

Keep the original evaluation purpose in mind. Organise results with reference to the objectives and goals of the program and report on how these have been met.

The interpretation of findings should be meaningful to stakeholders, funders and other trainers. Simple descriptive analysis of data is often all that is required. Avoid getting bogged down in detailed analyses that may not be helpful to the ultimate purpose of the evaluation. Highlight any strengths and weaknesses of the training program.

Table 7.2 below provides an outline of the key stages in data analysis and interpretation.

Table 7.2
Key Stages in Data Analysis and Interpretation

STAGES	QUANTITATIVE DATA	QUALITATIVE DATA
Cleaning or editing	Check the raw data for completeness, consistency, and comprehensibility.	Check the raw data for completeness, consistency, and comprehensibility.
Coding	Convert the data into numbers that can be counted i.e., assign a number for each answer to a question (such as Q1: 1 = *yes*; 2 = *no*).	Decide on a unit of analysis, then code written answers according to identified common themes/responses.
Data processing	Count the number of responses falling into each category of measurement. Manual counting for small amounts of data. OR Use a statistical software (e.g., SPSS, Excel), to enter data into a database	Count the number of responses falling into each category or classification. Manual count of classified responses. OR Use a software for qualitative data analysis (e.g., NVivo or NUD*IST), to enter data into a database.
Data analysis	Use statistics to summarise and interprete information (e.g., frequency counts, percentages, and mean).	Read and reflect on the responses to identify recurrent themes and ideas.
Interpretation	Prepare tables, graphs, percentages, etc., to show significant patterns of responses.	Describe themes, select quotes to illustrate significant themes and ideas.

Note. Adapted from Fink and Kosecoff, 1998; SACHRU, 1996.

Recommended Readings

de Vaus, D. A. (2002). *Surveys in social research* (5th ed.). Sydney, New South Wales: Allen & Unwin.

Fink, A., & Kosecoff, J. (1998). *How to conduct surveys: A step-by-step guide* (2nd ed.). Thousand Oaks, CA: Sage.

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CHAPTER 8
REPORT WRITING

The findings of a training evaluation should be reported back to program funders and participants' employer organisations through written reports and/or presentations. The evaluation findings can contribute to evidence-based decision-making regarding staff training and development and improvements to future training programs.

The format, content, and level of detail of an evaluation report will depend on the audience for the report and on stakeholders' requirements. In general, an evaluation report should describe what happened, when, where, why and who was involved in the training and evaluation.

The results of the evaluation should focus on the original purpose (aims, goals, objectives) of the training. The report format should highlight key results and recommendations in a clear and simple format.

Evaluation Report Structure

The evaluation report should be organised in a logical sequence so that readers can easily identify and access the information they require. Key features of a comprehensive report include:

1. Title page
2. Table of contents
3. Executive summary
4. Introduction
5. Evaluation methodology
6. Results
7. Discussion
8. Recommendations
9. Appendices.

A sample evaluation report is provided in Appendix H.

1. Title page

The title page of the report should provide the name of the project, authors, name of the commissioning organisation or individual and date of publication.

2. Table of contents

The various sections of the report are outlined in the table of contents. A list of tables and figures can also be useful to include after the table of contents.

3. Executive summary

An executive summary can be very useful, especially if the report is long and detailed. The summary provides a brief overview of the training program, the evaluation strategy, and the main findings and recommendations of the evaluation.

4. Introduction

The introduction section provides the rationale for the evaluation by clearly stating the goals, objectives and strategies of the training program and the purpose of the evaluation.

This section may also include a brief description of the training activities as they relate to program objectives, and a description of results. This provides a context for the evaluation and orients readers to the aims of the training program.

5. Evaluation Methodology

Record the evaluation plan and activities in the report. Describe:

- activities of the training program
- types of evaluation undertaken (level and type)
- types of data collection methods used – quantitative and/or qualitative
- methods implemented to collect data
- information collected (include any baseline data gathered during pre-program or needs assessment phases)
- number of training participants and response rate for evaluation surveys
- participant demographics (e.g., age, gender).

A sample evaluation methodology report using the case study of health worker training is provided in Box 8.1

6. Results

The result section provides a summary of the quantitative and qualitative data analysis. The data analysis techniques should be clearly described, including the treatment of missing data.

Quantitative findings can be presented using figures and tables. Integrate these graphic representations of the data into the text with an explanation of what each figure or table is depicting. All tables and figures should be clearly labelled.

BOX 8.1: EXAMPLE EVALUATION METHODOLOGY REPORT

Over a period of 6 months, three one-day workshops were held for health workers who counsel injecting drug users. Twenty participants attended the first workshop, 15 attended the second, and 17 attended the last workshop.

The effectiveness of the training program was measured using a process questionnaire. At the end of the training, participants were asked to comment on the quality of the teaching, the handouts and resources provided, and the relevance of the program to their everyday work. Participants were also asked how they might use the knowledge and skills they had gained back in their workplace.

The impact of the program was measured in two ways. Firstly, participants were asked to complete a two-page questionnaire at the beginning and at the end of the one-day training. This pre-post test questionnaire contained knowledge, confidence, and competency questions and basic demographics. Two months after the training attempts were made to contact each participant and re-administer the pre-post questionnaire over the telephone. Post-training telephone surveys were conducted with 18 participants from the first workshop, 14 participants from the second workshop and 15 participants from the last workshop. Of the participants who did not complete the follow-up survey four people had moved jobs and could not be contacted and one person declined to be surveyed due to work demands.

Qualitative findings can be reported by describing common as well as infrequent themes identified in participants' responses. Quotes from participants' responses can be used to illustrate identified themes and ideas.

7. Discussion

The discussion section of an evaluation project summarises and highlights key findings of the analysis and places the findings in the context of the program goals and objectives. Explanations for unexpected or negative findings should also be explored.

The discussion of findings from the evaluation should consider the following issues:

- limitations of the evaluation and sources of bias
- validity of results (e.g., are the findings accurate?)
- reliability of results (e.g., are the findings consistent?)
- generalisability of results (e.g., can the findings be applied to other groups who have undergone the same training?)
- alternative explanations for the results (e.g., work practice change (or lack of) due to organisational change, legislative changes or other events external to training)
- a comparison of the current results with other similar programs

- unintended outcomes (positive and negative), such as the identification of factors that influence participants' capacity to transfer their learned knowledge, skills, and abilities to work practice.

It is also useful to report the 'lessons learnt' from the evaluation process, for example if a particular data collection process worked well (e.g., focus groups) compared to other methods.

8. Recommendations

It is useful for key stakeholders if the findings of the evaluation are translated into recommendations regarding future training and evaluation programs to ensure effective training transfer and work practice change. For example, a recommendation may be to ensure continuing support for an existing training program, or to suggest improvements to future programs. The evaluation may also have identified non-training options to improve work practices, for example, more effective supervision by managers or a mentoring program.

9. Appendices

Attach copies of any data collection tools used (e.g., questionnaire) and any other background material that was used in the evaluation. Figures and tables that provide further detail on evaluation findings may also be included in appendices.

Dissemination

The dissemination of evaluation findings to trainers, other AOD organisations and funders is an important exercise. It contributes to the AOD education and training evidence base and can inform future training initiatives.

There are many ways to disseminate evaluation findings, including:

- journal articles
- electronic media (e.g., list servers)
- conference presentations
- community outreach materials
- newsletter articles.

Recommended Readings

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GLOSSARY

Case study analysis

A method of knowledge and skill assessment. Participants are asked to analyse a particular case and determine the best course of action.

Close-ended question

A question that limits responses to pre-determined categories (e.g., yes/no answers and multiple choice options).

Codebook

A list of variables, their range of possible values and definitions of codes that have been assigned to these for data analysis.

Coding

The process of organising data into sets of categories to capture the main themes in the data. Qualitative and quantitative data can be coded into categories.

Comparison group

A group of people with similar characteristics to the participants in a training program, but who do not receive the training. The two groups are compared over time, to evaluate the effects of training on work practice.

Competency

The skills and knowledge required for effective performance in a particular position or role in the workplace.

Confounding factors

Events or conditions that take place during the course of a training program or evaluation period that may influence the outcomes of training. It is important distinguish these factors from the effect of the training program.

Control group

A type of comparison group in which the participants are drawn randomly from the same population as the experimental (training) group. Participants are randomly allocated to the two groups. The two groups are compared over time, to evaluate the effects of training on work practice.

Effectiveness

The capacity of a program (e.g., training) to achieve its intended effect in the group of people to whom it is offered.

Efficiency

The effectiveness of a program in relation to costs (in terms of resources - time, labour, materials, etc.).

Evaluation

The systematic assessment of a program and its outcomes in relation to stated objectives and goals.

Experiential learning

Learning through experience, either in a role play or a real situation in the workplace.

Focus groups

A method of data collection in which a small group of people are brought together to discuss a particular issue (e.g., the impact and outcomes of a training program).

Formative evaluation

A type of evaluation conducted during the implementation of a program. Its primary purpose is to provide information that can be used to improve a program (see also **summative** evaluation).

Frequency

The number of responses in each category of a variable.

Goal

The long-term intended outcome of a program or intervention. For evaluation purposes a training goal should be **S**pecific, **M**easurable, **A**chievable, **R**elevant, and **T**ime specific (**SMART**).

Impact evaluation

Impact evaluation is concerned with the immediate effects of a program. It assesses training outcomes against the program objectives regarding participants' knowledge, skills and abilities.

Indicator

A specific measure of a more abstract concept. For example, an indicator can describe a level of performance or a behaviour that is required to demonstrate that the trainee has transferred the knowledge, skills and/or abilities developed during training into their work practice.

Job or task simulation

A method of knowledge and skill assessment. Trainees are evaluated on how well they demonstrate the knowledge and skills necessary for a particular job (e.g., counselling skills).

Likert scale

A scale used in the response categories of scaled questions or statements (e.g., strongly agree, agree, undecided, disagree, strongly disagree).

Mean

The average score. It is calculated by adding the values for all cases and dividing by the number of cases. It is a measure of central tendency.

Median

The value of the middle case in a ranked set of data. It is a measure of central tendency.

Missing data

When a response is not received for a particular question that case is given a distinctive code (e.g., 99) indicating that the respondent has not answered the question and should be excluded from the analysis of that question.

Mode

The most frequently observed value of a variable or factor. It is a measure of central tendency.

Needs assessment

The initial step in planning an intervention or program. It involves identifying and prioritising needs and target groups for training. A training needs assessment looks at the change required in workers' knowledge, skills and abilities.

Objective

The desired immediate impact of a program. It is stated in terms of outcomes that can be measured or assessed (how much improvement or change, by whom, and by when).

Open-ended question

A question that asks respondents to answer in their own words.

Operationalise

The process of defining a concept in a concrete way so that it can be measured. A training program's goals and objectives can be operationalised into measurable variables or units for evaluation purposes.

Outcome evaluation

The final phase of an evaluation. It considers whether a program has achieved its goal and objectives in regard to participants' work practice change and performance.

Pilot

A preliminary trial of a program or evaluation. A program or materials are trialed with a small group of people before implementation. Feedback can be used to improve the training program and its evaluation.

Post-test

Measurements of participants' knowledge, skills, abilities, and behaviours collected *after* training. The results can be compared with a pre-training test, in order to evaluate the impact of training.

Pre-test

Measurements of participants' knowledge, skills, abilities, and behaviours taken before a training program begins. Pre-tests can be compared with a post-training test, in order to evaluate the impact of a program.

Process evaluation

Process evaluation examines the processes involved in delivery of training including program activities and participants' reaction and satisfaction with the program implementation. Process information can be used to make changes to ongoing programs. It can also include pre-testing of materials and methods.

Program planning

The process of setting goals and objectives, and selecting strategies and activities for a program. A program plan outlines what the program aims to achieve and the strategies that will be implemented to achieve these aims.

Qualitative data

Data collected as words (e.g., interview, diary) rather than numbers. The data cannot be used for statistical analysis.

Quantitative data

Numerical data that can be used in statistical analyses.

Role play

Trainees practice a newly learned skill in an assigned role with specific instructions. Their performance is assessed against pre-determined criteria.

Stakeholders

Those people with a direct interest in a program and/or evaluation. Stakeholders may be trainers, participants, managers, program funders and community members.

Summative evaluation

An evaluation conducted at the end of a program (or phase of a program) to determine the extent to which the planned outcomes or goals were achieved. Summative evaluation is intended to provide stakeholders with information about the merit or worth of a program. (see also **formative** evaluation).

Triangulation

The process of using multiple methods of data collection methods to examine the same event or concept. The strengths in one method can compensate for the weaknesses in another method. For example, a combination of quantitative and qualitative data collection methods can be used.

APPENDIX A

STRATEGIES TO IMPROVE TRAINING TRANSFER AND MAINTENANCE OF WORK PRACTICE CHANGE

The following list provides a range of strategies that can be used to facilitate training transfer and work practice change. Trainers may be able to incorporate one or more of the strategies into their program (Parry, 1997, p. 51).

STRATEGY	DESCRIPTION
1. Action plan	Participants complete an action plan outlining steps that will be taken back in the workplace to apply the newly learned concepts and skills. The participant can discuss this plan with their supervisor and both can agree on when and how the plan will be implemented.
2. Follow-up training session	A follow-up training session can be scheduled some weeks after the end of the training program. Participants can report on their capacity to transfer training to their work practices and strategies, and strategies used to facilitate this process and overcome barriers to practice change.
3. Create an association for participants	Create an association for participants who have completed the training program. The group could meet in person or be linked by email, to discuss areas of interest and further training.
4. Newsletter	A newsletter with instructive articles could be developed to provide information to participants (e.g., success stories of how a participant changed their work practices).
5. Participants' reports	Participants could be asked to send in a short report that summarises a work situation relevant to the training and describes how the learning strategies acquired during the training program were used. Success stories could be reported in a newsletter or email list.
6. Extensive training programs	Instead of conducting training courses intensively over a short time period, shorter training periods over a longer time span may be more effective. This allows participants time to apply new knowledge, skills and abilities in their workplace, and to develop strategies to overcome barriers to training transfer.
7. Meet with managers and/or supervisors	Contact managers and supervisors of participants before and/or after the training program to brief them on the training objectives, content, format and their role as a partner in the training of their staff.
8. Training to support team members	If participants work in teams training may be more effective if conducted with team members. Strategies to enhance team dynamics (e.g., support, coordination) can also be included in the training.
9. Planning tools	Demonstrate the use of planning sheets, flowcharts, checklists, and other job aids in the training program. Participants may find it useful to use these planning tools back in their workplace.
10. Follow-up support in the workplace	Work with managers and supervisors to schedule follow-up support for participants as they return to their work.
11. Training advisory group	Work with managers to form a training advisory group. This group can provide input and guidance in the development of training courses. They can also provide follow-up monitoring and support of work practice change by participants.
12. List of new work practices	Provided participants and their managers with a list of behaviours or work practices to be observed and evaluated back at work following training.

APPENDIX B

EXAMPLE PROCESS EVALUATION FEEDBACK FORM

PEER EDUCATION TRAINING PROGRAM EVALUATION

SESSION FEEDBACK SHEET

SESSION ONE – (Record: *day, month, year*)

This questionnaire is anonymous and confidential. Please do not put your name anywhere on this questionnaire.

1. **Please rate how useful each component of this session was in regard to improving your understanding of AOD-issues relevant to young people.**

COMPONENT	Not at all useful	Fairly useful	Moderately useful	Very useful	Extremely useful
Introductory component	1	2	3	4	5
Drugs – classification/frameworks and potential harms	1	2	3	4	5

2. **A number of different teaching methods were used in this session. Please rate how useful each component of this session was in regard to improving your understanding of AOD-issues relevant to young people.**

TEACHING METHOD	Not at all useful	Fairly useful	Moderately useful	Very useful	Extremely useful
Lectures	1	2	3	4	5
Small group activities	1	2	3	4	5
Individual exercises	1	2	3	4	5
Role plays	1	2	3	4	5
Handouts	1	2	3	4	5
Other *(please specify)*					
.....	1	2	3	4	5

3. **Are there any topics or issues that would have been valuable to include in the session?**

Please go to next page

4. **Are there any topics or issues that were not necessary to include in the session?**

5. **Are there any aspects of the session that would be better addressed in a different way (e.g., using a different activity or presenter)**

6. **Did the session meet your expectations? If not, why not?**

7. **Any other comments?**

Thank you for completing this questionnaire

(McDonald et al., 2003)

APPENDIX C

EXAMPLE IMPACT EVALUATION FEEDBACK FORM

[*An impact evaluation form can be designed for pre- and post-training tests.*]

PEER EDUCATION TRAINING PROGRAM EVALUATION

INSTRUCTIONS

This questionnaire is designed to assess perceptions of knowledge and skills in the area of AOD youth peer education. It is used as part of a broader evaluation to assess the effectiveness of the training program.

Please read each statement carefully and circle the number which best describes your level of agreement with the statement.

This questionnaire is anonymous and confidential. Please do not put your name anywhere on the questionnaire. However, please write you grandmother's first name at the top of this page so that we can match the pre- and post-training questionnaires of each person.

1. **I understand how models of addictive behaviours can be related to the needs of young people.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

2. **I understand the implications for young people of the effects of drugs.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

3. **I am able to identify the harms that can arise from drug use in relation to young people.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

4. **I can describe the risks that young people may be exposed to in relation to drug use.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

5. **I can communicate strategies to avoid drug-related harms to young people.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

Please go to next page

6. **I can communicate strategies to respond to drug-related risk to young people.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

7. **I can describe strategies that could be used to assess the information and education needs of a group of young people.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

8. **I can design an educational strategy to respond to the needs of young people.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

9. **I am aware of the basic principles of program evaluation.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

10. **I know how to find resources to assist me in developing an educational strategy for young people.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

11. **I am able to identify the legal issues that relate to running an education or information program for young people.**

1	2	3	4	5
strongly disagree		uncertain		strongly agree

Thank you for completing this questionnaire

(McDonald et al., 2003)

APPENDIX D.1

TRAINING NEEDS ANALYSIS – EXAMPLE WORKERS' SURVEYS

SURVEY 1

To determine which training topics will be ***of greatest help to you in improving your job performance,*** *we need your input. Please indicate your need for each topic by ticking the appropriate column.*

Training topics	High priority	Medium priority	Low priority
1. Binge drinking			
2. Counselling skills for working with injecting drug users			
3. Information on safer injecting practices			
4. Information on blood-borne viruses (BBV)			
Other topics of *(please specify)*			

Note. Adapted from Kirkpatrick, 1998.

Respondents' data can be collated and descriptive statistics produced. For example, 60% of respondents may indicate that binge drinking, counselling skills and information on safer injecting practices are a high priority.

SURVEY 2

a. Please rank and describe the 5 biggest challenges you face in your job that keep you from being as effective as you think you could be.

b. Identify any possible training solutions for each problem listed.

c. Please also suggest possible non-training solutions.

Rank	Performance challenge	Training solutions	Non-training solutions
1			
2			
3			
4			
5			

Note. Adapted from Holton et al.. 2000b.

Managers and supervisors can also be asked to rank the training needs of workers. The same survey form can be adapted with changes made to the instructions. There will probably be some difference in the ranking of topics according to the different groups surveyed. A reference group of managers, supervisors, and workers could then be used to assist in the final determination of training priorities.

APPENDIX D.2

TRAINING NEEDS ANALYSIS – EXAMPLE INTERVIEW QUESTIONS FOR MANAGERS/SUPERVISORS

1. **What is the mission of your agency/organisation?**

2. **What are the key goals/objectives of your agency/organisation that support this mission?**

3. **What are the key areas with the greatest potential for improvement in order to enable the organisation to meet its goals/objectives and achieve its mission? These could be performance deficiencies or simply opportunities for improvement.**

4. **Why did you choose these areas?**

(Adapted from Holton et al., 2000a)

APPENDIX E

TRAINING AND EVALUATION PLANNING TEMPLATE

GOAL:	INDICATORS:	OUTCOME DATA COLLECTION METHODS:
OBJECTIVES:	INDICATORS:	IMPACT DATA COLLECTION METHODS:
STRATEGIES:	INDICATORS:	PROCESS DATA COLLECTION METHODS:

Note. SACHRU, 2003.

APPENDIX F.1

QUALITATIVE DATA COLLECTION METHODS

Methods	Description	Applications	Strengths	Limitations	Data Collection	Data Analysis
Focus groups	• semi-structured discussion with 8-12 stakeholders • led by a facilitator who follows an outline and manages group dynamics • discussion is recorded.	• to gather in-depth information from a small number of stakeholders • to pre-test materials with a target audience • to develop a better understanding of stakeholder attitudes, opinions, language • often used to prepare a survey.	• provides in-depth information • implementation and analysis requires a minimum of specialised skills • can be inexpensive to implement.	• participants influence each other • potential for facilitator bias • can be difficult to analyse • results may not be representative of views in a population.	• audio recording • facilitator's notes • observer's notes • participant's feedback forms.	• content or theme analysis of transcribed recording or facilitator/ observer notes.
In-depth Interviews	• telephone or in-person interviews • interviewer follows an outline but has flexibility.	• to investigate sensitive issues with a small number of stakeholders • to develop a better understanding of stakeholder attitudes, opinions and language.	• provides a confidential environment to discuss sensitive issues • reduces peer influence • opportunity for interviewer to explore unexpected issues • more detailed information than focus groups.	• can be more expensive to implement and analyse • results may not be representative of views in a population.	• audio recording • interviewer's notes.	• content/theme analysis of transcribed recording or notes • frequency counts of similar answers to specific questions.
Open-ended survey questions	• questions in any type of survey or questionnaire that allows the respondent to provide an answer in their own words	• to add depth to quantitative results • to further explore the reasons for answers to closed-ended questions • for exploratory questions.	• adds depth to quantitative data • may reveal unexpected findings.	• time-consuming to analyse properly • adds considerable time to the survey.	• purpose designed questions and/or questionnaire.	• content/theme analysis • frequency counts of similar answers to specific questions.
Diaries	• on-going documentation of specific activities/ behaviours.	• can be used for outcome evaluations of post-training changes to work practice.	• places other evaluation results in context • may identify barriers to change • inexpensive to collect data.	• can be difficult or expensive to analyse • time consuming for participants.	• diary entries before, during, and after training.	• content/theme analysis of each time period.

APPENDIX F.2

QUANTITATIVE DATA COLLECTION METHODS

Methods	Description	Applications	Strengths	Limitations	Data Collection	Data Analysis
Surveys & Questionnaires	• completion of structured questionnaire by a group of individuals • can be completed by telephone, mail, fax, internet or in-person.	• to collect information that can be quantified & statistically analysed.	• minimises influence of others (e.g., interviewer, peers) • large volume of information can collected in short period of time.	• may not provide a comprehensive understanding of respondents' perspective • requires some statistical knowledge and other specialised skills to process and interpret results.	• surveys may contain open-ended and closed questions in various formats.	• depending on the type of questions asked, analysis may be qualitative – content and theme analysis with reporting of frequency of participant's responses • quantitative responses may require calculation of frequencies, percentages and means.
Large Data Sets	• accessing existing sources of research data for information about population of interest (e.g., nurses, GPs).	• position program /project within a broader context • monitor trends in population of interest.	• can be inexpensive or free to access • provides accurate, well-researched information • can lead to networking and information sharing opportunities.	• minimal usefulness for evaluating specific programs • can be difficult to relate information to a specific program.	• from existing records.	• may require comparison of frequencies or percentages between reported statistics and data collected in a specific training program.

(continued over page)

(continued)

Methods	Description	Applications	Strengths	Limitations	Data Collection	Data Analysis
Standardised Tests	• established instruments or measurements tools with demonstrated validity (accurate measures) and reliable (provide consistent & stable measurement) • can be self-administered at training or by mail, fax or e-mail before and after training.	• established means of measuring impact and outcome by pre- and post-testing • enables comparison with evaluations of other programs that have used the same measures.	• recognised validity and reliability • no preparation involved (i.e., ready-to-use).	• can be expensive (often have to purchase tests) • may need a professional to administer and score • assume some statistical knowledge • may not be appropriate for the specific purposes of a particular program.	• participant's responses to standardised test items.	• quantitative analysis • may require standardising individual test scores using a formula provided • test norms may be available with which to compare individual respondent's scores.
Program-based Questionnaire	• instrument or measurement tool designed specifically for a program • can be self-administered at training or by mail, fax or e-mail before and after training.	• questions can be designed to address specific areas of the training program (e.g., knowledge, skills, attitudes, confidence, competence) • used to measure impact, possibly outcome of training if used as a post-training measure.	• data is directly related to a specific program • can be designed to provide both quantitative and qualitative data • can be used to collect data during process impact and outcome evaluations.	• time consuming to develop • reliability and validity is not known.	• participant's responses to questionnaire items.	• analysis required will depend on sophistication of questionnaire. • quantitative & qualitative analysis may be required.

APPENDIX G

SAMPLE QUESTIONNAIRE AND CODEBOOK ENTRY

[TITLE]

A QUESTIONNAIRE FOR HEALTH CARE WORKERS ABOUT SAFER INJECTING PRACTICES FOR INJECTING DRUG USERS

[INTRODUCTORY STATEMENT]

This questionnaire is designed to be used before and after the 'Safer Injecting' workshop. It provides your training provider with information about how effective the training has been for each participant.

Responses to this questionnaire are confidential and anonymous. Please do not write your name on this questionnaire.

[INSTRUCTIONS]

Please try to answer every question. Once you have completed the questionnaire, return it to the trainer in the envelope provided.

[QUESTIONS]

1. Which of the factors listed below is NOT a transmission risk for hepatitis C?

- Imprisonment ❒
- Intravenous drug use ❒
- Sharing eating utensils (e.g., plates) ❒
- Body piercing and tattooing ❒
- Pre-1990 blood transfusion ❒

Close-ended question (multiple choice)

Frequency count for each answer (3 is the correct choice)

Code:
- 1 = imprisonment
- 2 = IDU
- 3 = sharing eating utensils
- 4 = body piercing and tattooing
- 5 = pre-1990 blood transfusion
- 9 = missing data

2. Hepatitis A, B, and C can all be transmitted through bodily fluids.

- Yes ❒
- No ❒
- Don't know ❒

Close-ended question

Code:
- 1 = yes
- 2 = no
- 3 = don't know
- 9 = missing data

3. It is OK for a person with hepatitis C to share injecting equipment with other people who also have hepatitis C.

- Yes ❒
- No ❒
- Don't know ❒

Close-ended question

Code:
- 1 = yes
- 2 = no
- 3 = don't know
- 9 = missing data

4. List THREE items used to inject drugs that are potential routes of hepatitis C transmission.

1. .....
2. .....
3. .....

Open-ended question. Can collate all answers given and do a frequency count of common themes.

5. How confident do you feel providing informati on about safer injecting practices to:

a. A young person who hasn't injected before (but intends to do so).

1	2	3	4	5
not at all confident				very confident

b. A person who has been injecting for many years.

1	2	3	4	5
not at all confident				very confident

Close-ended question (scaled question).

Mean (average) score for **a** & **b**.

Frequency count of responses at each interval.

6. What basic information should an injecting drug user have about safer injecting practices?

Open-ended question. Identify common responses and count frequency.

7. What is your gender?

Male ❒

Female ❒

8. To which of the following age groups do you belong?

20-30 ❒

31-40 ❒

41-50 ❒

>51 ❒

Close-ended question.

1 = 20-30
2 = 31-40
3 = 41-50
4 = >51
9 = missing data

Frequency count or percentage in each age group.

9. On average, how many people who inject drugs do you counsel per week?

Close-ended question. Calculate a mean (average) for the whole group. Report the range of responses.

10. Would you like to make any comments or suggestions about the content of this training program?

Box G.1 provides an example of a codebook entry for Question 2.

BOX G.1: SAMPLE CODE BOOK ENTRY

Question 2: Hepatitis A, B and C can all be transmitted through bodily fluids?

Variable name: Knowledge of hepatitis transmission abbreviated to HEPTRANS
Valid response codes Yes = 1, No = 2, Don't know = 3
Missing data = 9
No special instructions

Data entry

When coding has been completed a data file must then be developed. Responses to questions need to be entered into a data file before data can be analysed. A data file can be designed manually or by a specialised computer package such as SPSS.

A data file can be created manually by drawing up a rectangular file or table (see Box G.2). In a rectangular file, each row contains all the data for a particular respondent and each column represents responses to each variable or question. Responses are entered using the codes allocated to each item. Each respondent is identified by a unique number (see 'ID' column in Box G.2) and their answers to each question (or variable) recorded along the row aligned with their ID number.

The sample data file (Box G.2) records that respondent 001 has answered 'yes' to Question 2 (Variable B = HEPTRANS). The response 'yes' has been coded as 1, as previously outlined in Box G.1, therefore the number 1 is recorded for ID 001 in the column headed Variable B HEPTRANS. However respondent ID 002 has answered 'no' and the number 2 is recorded for this person's response to Question 2 (Variable B HEPTRANS). ID 003 did not answer Question 2 therefore the number 9 (for missing data) is recorded for this person's response to Question 2.

BOX G.2: SAMPLE DATA FILE

ID	Variable A RISKFACTS	Variable B HEPTRANS	Variable C	VarD	VarE	VarF	VarG
001	2	1	1	1	2	9	9
002	3	2	1	2	2	1	2
003	3	9	1	1	2	1	1
004	9	2	3	2	2	1	2

A manual tally sheet is another method of data entry. Responses to each question in the questionnaire are recorded on a separate tally sheet. The responses to each individual answer category are then counted. See Box G.3 below for an example of a tally sheet.

BOX G.3: SAMPLE TALLY SHEET

Question 1. Which of the factors listed below is NOT a transmission risk for hepatitis C?

1	2	3	4	5	6
Imprisonment	*Intravenous drug use*	*Sharing eating utensils, e.g., plates*	*Body piercing and tattooing*	*Pre 1990 blood transfusion*	*Missing data*
1111	111	11111111111 111	1	11	111
(4)	(3)	(14)	(1)	(2)	(3)
(The correct answer is response number 3.) (14 correct responses are recorded. That is, 51% of respondents recorded the correct answer to this question.)					

Some careful consideration should be given to the method of data processing. Although manual calculations can be easily done for a small number of questions such as the responses of 10 participants to a two page questionnaire, if each participant has completed the questionnaire over two time periods, then there is significantly more information to be managed. It may be more time and resource efficient to use a computer package for data processing and analysis.

Computer packages such as SPSS use spreadsheets that are similar to rectangular files. If you are doing your analysis by computer, now is the time to access help if you are unfamiliar with computer data entry and analysis. Each program will have their own requirements for inputting data, and you will need to become familiar with these.

APPENDIX H

EXAMPLE EVALUATION REPORT

EXAMPLE EVALUATION REPORT ON

HEALTH WORKERS' TRAINING PROGRAM

DATE
[insert here]

ORGANISATION
[insert here the name of your organisation]

TABLE OF CONTENTS
[insert here]

EXECUTIVE SUMMARY
[insert here]

INTRODUCTION
A training program was designed for health workers as part of a project to improve health services for injecting drug users.

The goal of the training was to increase health workers' ability to provide appropriate services to injecting drug users.

The training program was designed to address 3 specific objectives:

1. To increase health workers' knowledge of safer injecting practices and blood-borne viruses.
2. To increase health workers' understanding of issues that are relevant to intravenous drug users regarding safer injecting practices and blood-borne viruses.
3. To increase the confidence of health care workers in their ability to provide appropriate services to injecting drug users.

The training program was implemented over a period of 6 months, with three one-day workshops held for health workers. Twenty participants attended the first workshop, 15 attended the second and 17 attended the last workshop (total of 52 participants, 38 women and 14 men). Over half of the participants were aged between 30 and 40 years.

EVALUATION METHODOLOGY
The effectiveness of the training program was evaluated using a process questionnaire administered at the end of the training (see Appendix G). Participants were asked to comment on the quality of the teaching, handouts and resources provided, and the relevance of the program to their everyday work. They were also asked how they might use the knowledge and skills gained in training in their work practice.

The impact of the training program was measured by asking participants to complete a two-page questionnaire at three time points: immediately prior and following training and at a 2-month follow-up. This questionnaire addressed participants' knowledge and confidence in regard to providing services to injecting drug users (see Appendix G). Demographic information was also collected.

Of the 52 people who attended the workshop 47 (90%) completed process questionnaires. Three people left the workshop before it concluded, and two did not hand in their process questionnaires. These same five people also did not complete the post-test questionnaire. There were 47 matching pre- and post-test questionnaires. Of these 47 participants, 40 (85%) took part in the follow-up telephone interview.

EVALUATION RESULTS

[A subset of findings is presented for the purposes of this example]

First Objective

The first objective of the program was to improve participants' knowledge of safer injecting practices and blood-borne viruses. Questions 1, 2 and 3 in the evaluation questionnaire tested the knowledge of participants concerning these issues.

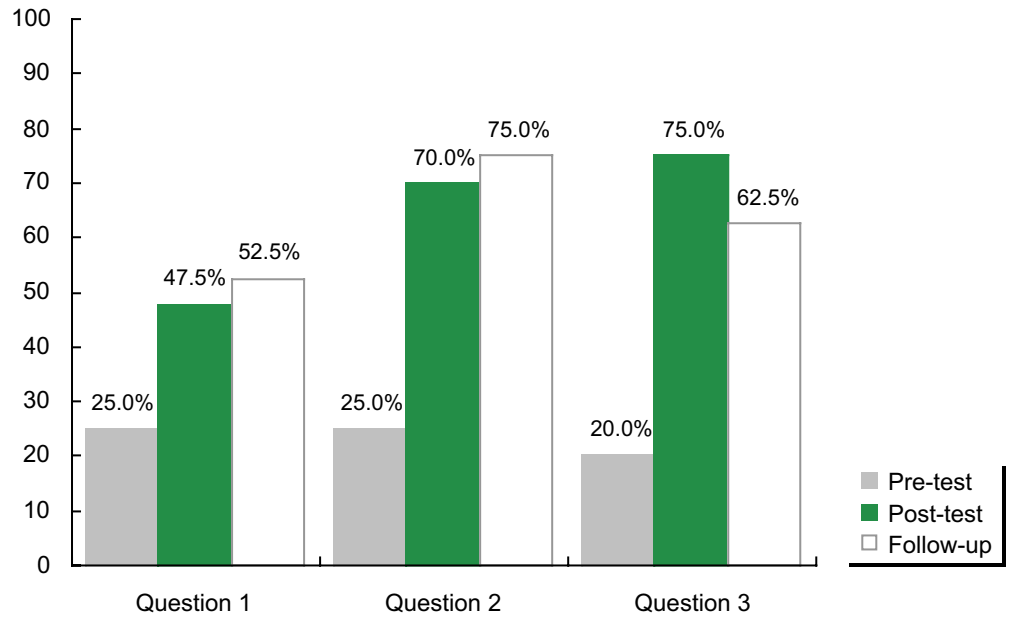

Figure H.1
Percentage of participants responding correctly to questions 1, 2 and 3 of the impact questionnaire.

As shown in Figure H.1, participants' level of knowledge regarding safer injecting practices and blood-borne viruses was low prior to training. Specifically:

- 25% of participants identified the correct answer to question 1 (routes of hepatitis C transmission)

- 25% of participants identified the correct answer to question 2 (transmission of hepatitis C virus), and
- 20% of participants identified the correct answer to questions 3 (appropriateness of sharing injecting equipment).

There was evidence of a substantial improvement in participants' knowledge on the post-training test. Specifically, after training:

- 48% of participants could correctly identify that sharing eating utensils was not a route of transmission for hepatitis C (Q.1)
- 70% of participants knew that not all three hepatitis viruses were transmittable through bodily fluids (Q.2), and
- 75% of participants knew that it was not OK for people infected with hepatitis C to share injecting equipment with other people infected with the virus (Q.3).

The results indicate that the training increased participants' knowledge of safer injecting practices and blood-borne viruses. Therefore, the training program achieved Objective 1.

Second Objective

The second objective was to increase health workers' understanding of issues relevant to injecting drug users in regard to safer injecting practices and blood-borne viruses.

When asked to list items used to inject drugs that are potential routes of hepatitis C transmission (Q.4), participants (at post-test and follow-up compared to pre-test) identified a much greater number of items that had the potential to transmit hepatitis C during injecting.

Similarly, when asked to specify the basic information a drug user should have about safer injecting practices (Q.6), participants (at post-test compared to pre-test) identified a much broader range of basic information that was important to give to intravenous drug users.

These results indicate that the training increased participants' understanding of issues that are relevant to intravenous drug users regarding safer injecting practices and blood-borne viruses. Therefore, the training program achieved Objective 2.

Third Objective

The third objective of the training program was to increase the confidence of health care workers in their ability to provide appropriate services to injecting drug users.

Two questions were asked to assess confidence (Q.5a and Q.5b). The first question (Q.5a) addressed confidence in providing information to a young person who was considering injecting. The second question (Q.5b) addressed the provision of information to an older, more experienced, injecting drug user.

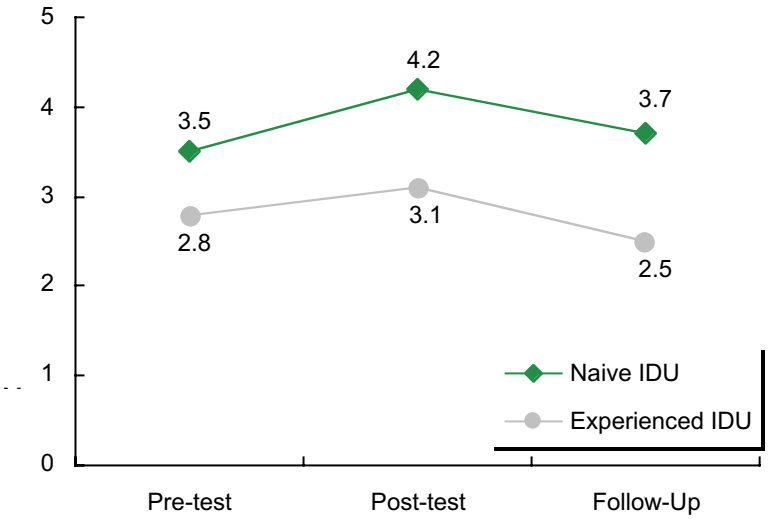

Figure H.2
Participants' level of confidence in providing information to injecting drug users (IDU).

As shown in Figure H.2, positive changes were observed in participants' confidence in providing information to both naive and experienced injecting drug users immediately after training. Compared to pre-training mean scores, participants reported higher levels of confidence in their capacity to give information to naive and experienced injecting drug users immediately after training. However, confidence declined at 2-month follow-up to levels close to or lower than pre-test levels.

The training program does not appear to have resulted in a sustained impact on worker's confidence in their ability to provide appropriate services to injecting drug users to a sufficient degree. Therefore, the training program appears not to have met Objective 3.

DISCUSSION

The goal of the training program was to increase health worker's knowledge of safer injecting practices and blood-borne viruses (Objective 1), awareness of issues relevant to injecting drug users related to safer injecting practices and blood-borne viruses (Objective 2), confidence in service provision (Objective 3), and the number of counselling sessions conducted with injecting drug users (Objective 4).

The training evaluation indicated that Objectives 1 and 2 were met, however Objectives 3 and 4 were not satisfactorily achieved. Overall, participants' knowledge and awareness of safer injecting practices and blood-borne viruses increased at post-training and was maintained at 2-month follow-up. However, increases in confidence levels were not maintained.

Possible explanations for the modest results of the training program include:

- the methods of evaluating confidence and change in work practice may not have been sufficiently sensitive to accurately assess perceptions of confidence and work practice change.

- the training in its present form is not sufficiently potent to achieve the desired outcomes.
- sufficient support was not provided in the workplace to sustain participants' confidence in their capacity to provide services to injecting drug users
- workplace factors may have prevented participants from increasing their client load (e.g., workload, organisational policies)

RECOMMENDATIONS

In order to ensure future training programs are more effective in facilitating health workers' capacity to provide appropriate services to injecting drug users it is recommended that:

1. A comprehensive training needs analysis is conducted prior to training to identify high priority areas of concern to managers, supervisors, and workers
2. The quality of training is improved (e.g., providing longer training sessions, include more opportunities for participants to practise their new skills, and build confidence)
3. A more comprehensive evaluation of the training program is conducted, which includes assessment of barriers and facilitators to work practise change
4. Strategies are implemented in participants' workplace, in order to support participants as they transfer their training into their work practices.

APPENDIX I

USEFUL ADDRESSES AND WEBSITES

The Australian National Training Authority (ANTA)
An Australian Government authority established to provide a national focus for vocational education and training (VET). It administers national training programs and the Australian Government funding of the national VET system.

Brisbane office:

ANTA
Level 11 AMP Place
10 Eagle Street
Brisbane QLD 400
GPO BOX 3120
Phone 07 3246 2300
Fax: 07 3246 2490
Website: http://www.anta.gov.au

Melbourne office:

ANTA
5/321 Exhibition St
Melbourne VIC 3001
GPO Box 5347BB
Phone: 03 9630 9800
Fax: 03 9630 9888

The Australasian Evaluation Society
A professional organisation for people involved in evaluation and performance measurement. Membership is broad based and includes teachers, students, managers and evaluation practitioners from a wide range of organisations and government sectors.

Australasian Evaluation Society
PO Box 223
Lyneham ACT 2602
Phone: 02 6262 9093
Fax: 02 6262 9095
Email: aes@aes.asn.au
Website: http://www.aes.asn.au

The Centre for Program Evaluation
An evaluation and research centre with interests in a wide range of areas such as education, health, welfare and training.

Centre for Program Evaluation
Faculty of Education
University of Melbourne
Parkville VIC 3010
Phone: 03 8344 8394
Fax: 03 8344 8490
Email: cpe-enquiries@unimelb.edu.au
Website: http://www.edfac.unimelb.edu.au/EPM/CPE

The National Centre for Education and Training on Addiction (NCETA)
A research centre focused on investigating workforce development issues in the alcohol and other drugs field.

NCETA
Flinders University
Level 3B, Mark Oliphant Bldg
Science Park
Bedford Park
SA 5042

Postal address:
GPO Box 2100
Adelaide SA 5001

Phone: 08 8201 7535
Fax: 08 8201 7550
Email: nceta@flinders.edu.au
Website: http://www.nceta.flinders.edu.au

The National Centre for Vocational Education Research (NCVER)
NCVER provides research, evaluation, statistical and other information to a wide range of stakeholders involved in the development of vocational education and training in Australia.

NCVER Head Office
Level 11, 33 King William Street
Adelaide SA 5000
Phone: 08 8230 8400
Fax: 08 8212 3436
Email: ncver@ncver.edu.au
Website: http://www.ncver.edu.au

The South Australian Community Health Research Unit (SACHRU)
SACHRU assists primary health care workers to undertake quality research to improve the effectiveness of primary health care.

SACHRU
G1 'The Flats', Flinders Medical Centre
Bedford Park SA 5042
Phone: 08 8204 5988
Fax: 02 8374 0230
Email: sachru@fmc.sa.gov.au
Website: http://www.sachru.sa.gov.au

WEB RESOURCES

Health Services Division. (2001). *Evaluation: A guide for good practice.* Canberra, Australian Capital Territory: Commonwealth Department of Health and Aged Care. Accessed January 8, 2003, at http://www.mentalhealth.gov.au/resources/

The Program Planning Evaluation Wizard (PEW)

The South Australian Community Health Research Unit (SACHRU) has designed this step-by-step guide on how to develop project and evaluation plans and write reports. Practical examples are also provided.

Accessed May 6, 2003, at http://www.sachru.sa.gov.au/pew/index.htm

APPENDIX J

WORK PRACTICE QUESTIONNAIRE

(FULL VERSION)

The Work Practice Questionnaire:

A Training Evaluation Measurement Tool for the Alcohol and Other Drugs Field

D. Addy
N. Skinner
J. Shoobridge
T. Freeman
A. M. Roche
K. Pidd
S. Watts

National Centre for Education and Training on Addiction, Flinders University

2004

Administration Instructions

The Work Practice Questionnaire (WPQ) is intended to be used as an AOD training evaluation tool. It addresses a range of individual, team and organisational factors that are likely to influence training transfer and work practice change. The WPQ also contains scales that address trainees' perception of education and training programs.

The WPQ can be administered prior to training and post-training as a short and/or long-term evaluation tool.

There are three companion documents that support the WPQ:

1. A monograph examining factors influencing training transfer and work practice change in relation to alcohol and other drugs: *From Training to Work Practice Change: An Examination of Factors Influencing Training Transfer in the Alcohol and Other Drugs Field.*[1]

   The monograph examines a wide range of factors that influence work practices in relation to alcohol and other drugs. It provides a review of evidence related to the influence of the factors assessed in the Work Practice Questionnaire on training transfer and work practice. Strategies to address each of the factors in order to facilitate training transfer and work practice change are also discussed.

2. Guidelines for evaluating AOD-related training: *Guidelines for Evaluating Alcohol and Other Drugs Education and Training Programs.*[1]

   The guidelines provide user-friendly information for evaluating alcohol and other drug education and training programs. The guidelines have been designed to support both novice and experienced trainers to develop, implement and analyse their training evaluation. The document includes a discussion of the aims and context of various types of evaluation, useful tools, tips and readings.

3. A handbook for the Work Practice Questionnaire: *Handbook for the Work Practice Questionnaire (WPQ): A Training Evaluation Measurement Tool for the Alcohol and Other Drugs Field*.[1]

   The handbook provides a detailed description of the WPQ and its psychometric properties.

The WPQ does not address every possible factor that may influence training transfer and work practice change – such a tool would be unwieldy and impractical to use. Rather, guided by a comprehensive review of the relevant research literature and extensive field-testing, the WPQ was designed to assess the key factors likely to influence AOD-related work practices.

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[1] Available from the NCETA website www.nceta.flinders.edu.au.

Structure of the WPQ

The WPQ contains four domains:

1. Individual (5 scales)
2. Team (4 scales)
3. Workplace (3 scales)
4. Organisational (5 scales).

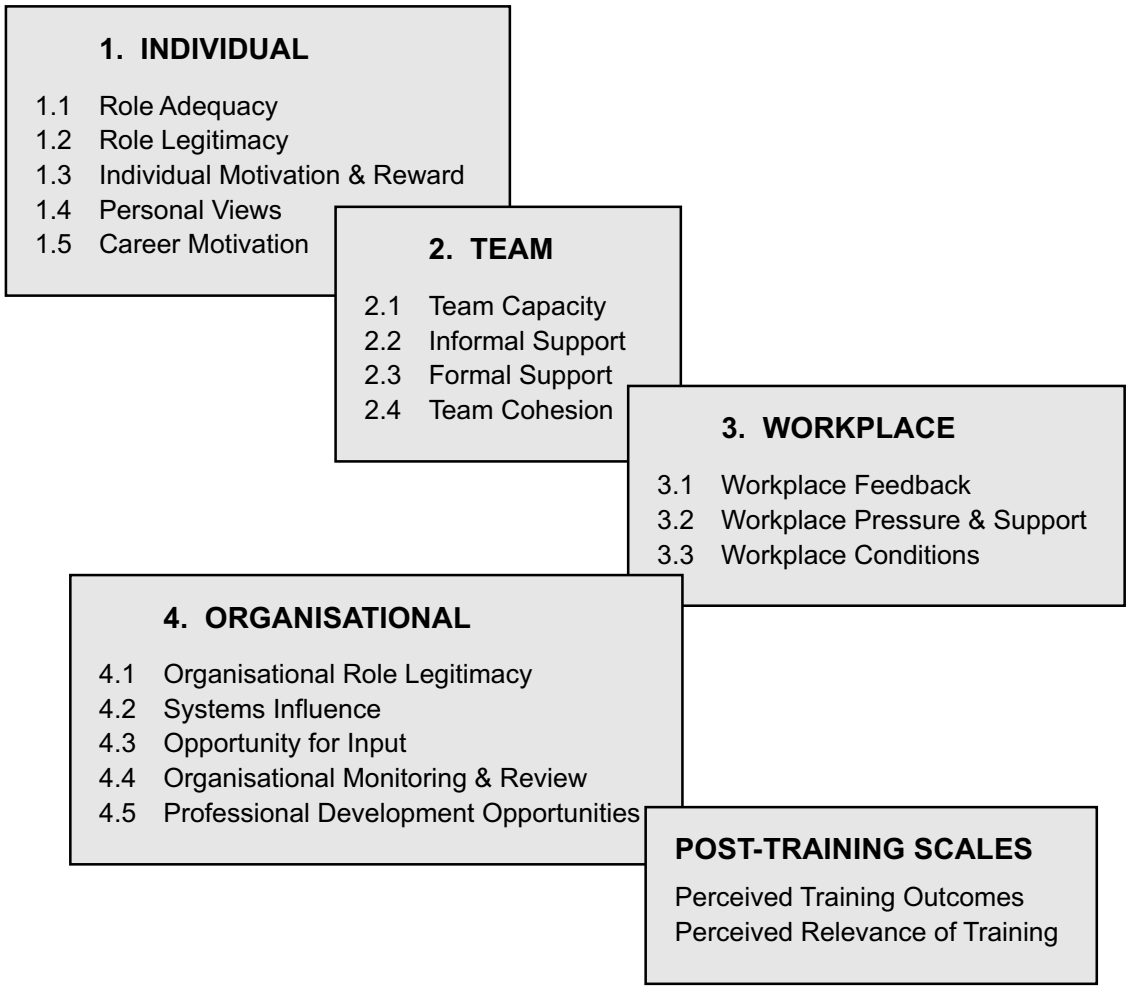

Figure 1
Structure of the Work Practice Questionnaire.

The **Individual** domain relates to the personal characteristics, beliefs and views of individual workers. Historically, it is mostly factors within this domain that AOD training evaluation has been limited to.

The **Team** domain addresses factors that relate to a team environment within the work situation such as team capacity, formal and informal support, and team cohesion.

The **Workplace** domain addresses factors in the working environment that are likely to impact on work practice such as availability of feedback, workload and other pressures, availability of support and general working conditions (e.g., job security, remuneration).

The **Organisational** domain addresses factors that impact on the functioning of the organisation as a whole, and hence may also impact on the capacity of individual workers to perform effectively.

The WPQ also contains two **post-training scales** which address participant's perceptions of the impact and relevance of training in regard to their work practice.

In some circumstances it may be appropriate to use a sub-set of the WPQ scales that are most relevant or appropriate to a particular training program, organisation or occupational group. However, where scales are considered relevant to use, it is recommended that ALL items within a scale are used. This will ensure scale scores are stable and reliable.

The WPQ usually takes approximately 9 minutes to complete.

Scoring

The score on each scale is obtained by calculating the average score across scale items. Some items in the WPQ are negatively worded and need to be reverse-coded prior to calculating the scale score. Table 1 indicates items that need to be reverse-coded.

Table 1
WPQ Scale Items Requiring Reverse-Coding

WPQ scale	Item(s) to be reverse-coded
Role Adequacy	i.5
Role Legitimacy	i.8, i.9, i.10
Individual Motivation and Reward	i.14, i.15
Team Capacity	t.4, t.7
Workplace Feedback	w.3
Workplace Pressure and Support	w.5, w.6, w.7
Workplace Conditions	w.12, w.13
Organisational Monitoring and Review	o.17
Perceived Relevance of Training	p.11

Application of the WPQ to AOD Work Practice

The WPQ can be used to guide the development of strategies to maximise the 'return on investment' in staff education and training. Strategies to address each of the factors assessed in the WPQ are discussed in further detail in the monograph *From Training to Work Practice: An Examination of Factors Influencing Training Transfer in the Alcohol and Other Drugs Field* (Pidd, Freeman, Skinner, Addy, Shoobridge, & Roche, 2004)[2].

The WPQ can also be used to identify facilitators and barriers to change in AOD-related work practices, regardless of whether a training program or other intervention has been put into place. Used in this way, the WPQ can provide information about the types of interventions that may be useful in facilitating appropriate AOD work practice change (e.g., enhancing supervision, increasing rewards and recognition for AOD-related work, enhancing professional development opportunities). Furthermore, the WPQ can provide useful information on the factors that indirectly influence organisational capacity and effectiveness (e.g., changes in team cohesion and team capacity post-training, changes in levels of perceived organisational role legitimacy post-training).

[2] Available from the NCETA website www.nceta.flinders.edu.au.

The Work Practice Questionnaire

This questionnaire contains a range of items concerning your views on responding to alcohol and other drug (AOD) related issues in your work practice, and your views regarding various aspects of your working environment.

Please complete BOTH SIDES of each page and read instructions carefully. Please try to answer ALL questions.

Please circle the number which best describes your level of agreement with each statement in the questionnaire. For example, if you really like jazz music - you would circle number 4.

	Disagree	Tend to disagree	Tend to agree	Agree
I really like jazz music.	1	2	3	4

INDIVIDUAL

INDIVIDUAL 1.1 ROLE ADEQUACY

		Disagree	Tend to disagree	Tend to agree	Agree
i.1.	I have the necessary experience to respond to alcohol and other drug related issues.	1	2	3	4
i.2.	In my work I have responded to a wide range of alcohol and other drug related issues.	1	2	3	4
i.3.	I am confident in my ability to respond to alcohol and other drug related issues.	1	2	3	4
i.4.	I have the necessary knowledge to help people with alcohol and other drug related issues.	1	2	3	4
i.5.	I do not have many of the skills necessary to respond to alcohol and other drug related issues.	1	2	3	4
i.6.	I am able to respond to people who have alcohol and other drug related issues as competently as I respond to people with other problems.	1	2	3	4

INDIVIDUAL 1.2 ROLE LEGITIMACY

		Disagree	Tend to disagree	Tend to agree	Agree
i.7.	I have a legitimate role to play in responding to alcohol and other drug related issues.	1	2	3	4
i.8.	I am reluctant to take responsibility for alcohol and other drug related issues in my work.	1	2	3	4
i.9.	It is more appropriate for other colleagues to respond to alcohol and other drug related issues, than myself.	1	2	3	4
i.10.	I am uncertain of my role in responding to alcohol and other drug related issues.	1	2	3	4
i.11.	I am clear about my responsibilities in responding to alcohol and other drug related issues.	1	2	3	4
i.12.	I have a responsibility to ask clients questions about alcohol and other drug related issues.	1	2	3	4
i.13.	My clients believe I have a responsibility to ask them questions about alcohol and other drug related issues.	1	2	3	4

INDIVIDUAL 1.3 INDIVIDUAL MOTIVATION AND REWARD

		Disagree	Tend to disagree	Tend to agree	Agree
i.14.	I prefer not to respond to alcohol and other drug related problems as I find it too frustrating.	1	2	3	4
i.15.	I refer people with alcohol and other drug related issues onto others to prevent me from wasting my time.	1	2	3	4
i.16.	I believe that responding to alcohol and other drug related issues is important.	1	2	3	4
i.17.	I get personal satisfaction responding to people affected by experiencing alcohol and other drug related issues.	1	2	3	4
i.18.	My experience of responding to alcohol and other drug related issues has been rewarding.	1	2	3	4
i.19.	On the whole I am satisfied with the way I work with people who have alcohol and other drug related issues.	1	2	3	4
i.20.	I like to respond to alcohol and other drug related issues in my work.	1	2	3	4

INDIVIDUAL 1.4 PERSONAL VIEWS

		Disagree	Tend to disagree	Tend to agree	Agree
i.21.	Most people with alcohol and other drug related problems are not interested in addressing them.	1	2	3	4
i.22.	I generally think people with alcohol and other drug related problems bring their difficulties on themselves.	1	2	3	4
i.23.	I try to avoid responding to people with alcohol and other drug related problems as they are unreliable.	1	2	3	4

INDIVIDUAL – *continued*

INDIVIDUAL 1.5 CAREER MOTIVATION

	Disagree	Tend to disagree	Tend to agree	Agree
i.24. There are professional advantages for me to respond to alcohol and other drug related issues.	1	2	3	4
i.25. Expertise in responding to alcohol and other drug related issues is highly regarded by my colleagues.	1	2	3	4
i.26. In career terms, there are definite advantages in improving my expertise in alcohol and other drug related areas.	1	2	3	4

TEAM

TEAM 2.1 TEAM CAPACITY

		Disagree	Tend to disagree	Tend to agree	Agree
t.1.	There is a comprehensive knowledge base among the people I work closely with concerning alcohol and other drug issues.	1	2	3	4
t.2.	Generally, responses to alcohol and other drug related issues provided by the people I work closely with are of good quality.	1	2	3	4
t.3.	Collectively, the skill base of the people I work closely with means we are well equipped to respond to alcohol and other drug related issues.	1	2	3	4
t.4.	I work closely with people who are not confident in their ability to respond to alcohol and other drug related issues.	1	2	3	4
t.5.	People I work closely with are willing to respond to alcohol and other drug related issues.	1	2	3	4
t.6.	The people I work closely with consider responding to alcohol and other drug related issues a legitimate part of their work.	1	2	3	4
t.7.	In general, people I work closely with give cases concerning alcohol and other drug related problems low priority.	1	2	3	4
t.8.	People I work closely with consider education and training for alcohol and other drug related issues an essential aspect of staff development.	1	2	3	4
t.9.	I work closely with people who are good role models in terms of responding to alcohol and other drug related issues.	1	2	3	4

TEAM 2.2 INFORMAL SUPPORT

		Disagree	Tend to disagree	Tend to agree	Agree
t.10.	Informal supervision (e.g., encouragement, peer support, guidance, mentoring) is provided amongst staff on alcohol and other drug related issues.	1	2	3	4
t.11.	I receive support from the people I work closely with about the work I do concerning alcohol and other drug related issues.	1	2	3	4
t.12.	There is good communication among the people I work closely with about alcohol and other drug related issues.	1	2	3	4
t.13.	My colleagues encourage me to intervene in alcohol and other drug related issues.	1	2	3	4
t.14.	If I needed to, it would be easy to find someone to give me advice on responses to alcohol and other drug related issues relevant to my workplace.	1	2	3	4

TEAM 2.3 FORMAL SUPPORT

		Disagree	Tend to disagree	Tend to agree	Agree
t.15.	Staff have access to a supervisor with expertise in alcohol and other drug related issues.	1	2	3	4
t.16.	Formal supervision (e.g., guidance, preceptorship) is provided amongst staff on alcohol and other drug related issues.	1	2	3	4
t.17.	The organisation I work for supports staff efforts to respond to alcohol and other drug related issues.	1	2	3	4
t.18.	This organisation has policies and procedures that support alcohol and drug related work.	1	2	3	4
t.19.	Staff have access to the tools/resources needed to respond to alcohol and other drug related issues (e.g., standard questionnaires, quit kits, referral information).	1	2	3	4

TEAM 2.4 TEAM COHESION

		Disagree	Tend to disagree	Tend to agree	Agree
t.20.	There is good team spirit amongst the people I work closely with.	1	2	3	4
t.21.	Morale is high among the people I work closely with.	1	2	3	4
t.22.	Generally, communication amongst the people I work closely with is good.	1	2	3	4
t.23.	Encouragement and support is commonly provided amongst the people I work closely with.	1	2	3	4
t.24.	In my workplace staff engage in good teamwork.	1	2	3	4
t.25.	In general I have a good relationship with staff at my workplace.	1	2	3	4
t.26.	I feel comfortable to ask for help or support from my colleagues or peers.	1	2	3	4
t.27.	In my workplace, the majority of staff do their share of work.	1	2	3	4

WORKPLACE

WORKPLACE 3.1 WORKPLACE FEEDBACK

		Disagree	Tend to disagree	Tend to agree	Agree
w.1.	I receive feedback from other people in my workplace on how I am performing my role.	1	2	3	4
w.2.	I have the opportunity (informally or formally) to discuss and receive feedback about my work performance with other staff.	1	2	3	4
w.3.	I am unhappy with the quality of feedback I receive about my work performance from other staff.	1	2	3	4
w.4.	Supervisors engage in constructive feedback with staff.	1	2	3	4

WORKPLACE 3.2 WORKPLACE PRESSURE AND SUPPORT

		Disagree	Tend to disagree	Tend to agree	Agree
w.5.	Too much is expected of all staff in my workplace.	1	2	3	4
w.6.	Staff members experience constant pressure in my workplace.	1	2	3	4
w.7.	Supervisors expect too much from staff in my workplace.	1	2	3	4
w.8.	There are enough staff in my workplace to provide quality services.	1	2	3	4
w.9.	Most of the time, supervisors provide adequate support when problems arise.	1	2	3	4
w.10.	In general, supervisors encourage staff to find positive solutions when problems arise.	1	2	3	4

WORKPLACE 3.3 WORKPLACE CONDITIONS

		Disagree	Tend to disagree	Tend to agree	Agree
w.11.	In my workplace staff are encouraged to take their allocated breaks.	1	2	3	4
w.12.	In my workplace, things are quite disorganised.	1	2	3	4
w.13.	In my workplace, time is wasted because of inefficiencies.	1	2	3	4
w.14.	In my workplace, the physical working conditions are good.	1	2	3	4
w.15.	I have my own allocated 'space' in my work environment.	1	2	3	4
w.16.	I am satisfied with my level of job security.	1	2	3	4
w.17.	I am satisfied with my level of pay.	1	2	3	4

ORGANISATIONAL

ORGANISATIONAL 4.1 ORGANISATIONAL ROLE LEGITIMACY

		Disagree	Tend to disagree	Tend to agree	Agree
o.1.	There is a philosophy that guides this organisation's responses to alcohol and other drug related issues.	1	2	3	4
o.2.	Responses to alcohol and other drug related issues are consistent with this organisation's responses to other health and/or social problems.	1	2	3	4
o.3.	This organisation has clearly stated goals/objectives about its involvement in alcohol and other drug related issues.	1	2	3	4
o.4.	Staff roles and responsibilities in responding to alcohol and other drug related issues are clearly laid out in their job descriptions.	1	2	3	4
o.5.	This organisation consistently strives to improve the alcohol and other drug related services it provides.	1	2	3	4
o.6.	This organisation has a legitimate role to play in responding to alcohol and other drug related issues.	1	2	3	4
o.7.	This organisation promotes itself as an organisation that responds to alcohol and other drug related issues.	1	2	3	4

ORGANISATIONAL 4.2 SYSTEMS INFLUENCE

		Disagree	Tend to disagree	Tend to agree	Agree
o.8.	Responding to alcohol and other drug related issues is a part of this organisation's service requirements and conditions of funding.	1	2	3	4
o.9.	This organisation receives funding specifically for responding to alcohol and other drug related issues.	1	2	3	4
o.10.	This organisation undergoes external evaluation of its alcohol and other drug related responses.	1	2	3	4
o.11.	Organisations in similar fields act as leaders or champions to this organisation.	1	2	3	4
o.12.	This organisation sees itself as competing with other organisations providing similar responses to alcohol and drug related issues.	1	2	3	4

ORGANISATIONAL 4.3 OPPORTUNITY FOR INPUT

		Disagree	Tend to disagree	Tend to agree	Agree
o.13.	This organisation is receptive to staff ideas and suggestions.	1	2	3	4
o.14.	Forums are available in this organisation where I can express my views and opinions.	1	2	3	4
o.15.	In this organisation disagreements are worked through.	1	2	3	4
o.16.	As a staff member, I can participate in the internal governance of the organisation (e.g., practice and policy committees, working committees).	1	2	3	4

ORGANISATIONAL 4.4 ORGANISATIONAL MONITORING AND REVIEW

		Disagree	Tend to disagree	Tend to agree	Agree
o.17.	Policies and procedures in this organisation tend to change only when there are external (legislation, media, change of government) pressures to do so.	1	2	3	4
o.18.	In this organisation, policies and procedures are regularly reviewed.	1	2	3	4
o.19.	This organisation reviews job descriptions regularly.	1	2	3	4
o.20.	This organisation monitors the quality of the services it provides.	1	2	3	4

ORGANISATIONAL – *continued*

ORGANISATIONAL 4.5 PROFESSIONAL DEVELOPMENT OPPORTUNITIES

		Disagree	Tend to disagree	Tend to agree	Agree
o.21.	Staff members are encouraged to undertake training courses.	1	2	3	4
o.22.	Professional development planning in this organisation takes into account individual needs and interests.	1	2	3	4
o.23.	Staff members are supported in pursing qualifications or professional development related to their job.	1	2	3	4
o.24.	This organisation provides back-up staff to allow people to attend training.	1	2	3	4
o.25.	This organisation provides staff with access to a wide variety of education and training opportunities.	1	2	3	4
o.26.	All staff members have equal access to training.	1	2	3	4
o.27.	Opportunities exist in this organisation for developing new skills.	1	2	3	4

POST-TRAINING SECTION: PERCEPTIONS OF TRAINING

PERCEIVED TRAINING OUTCOMES	Disagree	Tend to disagree	Unsure	Tend to agree	Agree
p.1. This training program has enabled me to respond to alcohol and other drug related issues with greater confidence.	1	2	3	4	5
p.2. I gained skills or knowledge from this training program that enabled me to work more effectively with alcohol and other drug related issues.	1	2	3	4	5
p.3. This training program effectively illustrated links between the theory of responding to alcohol and other drug related issues and the practical aspects of responding.	1	2	3	4	5
p.4. The information/materials provided in the training program improved the quality of alcohol and other drug related responses in my workplace.	1	2	3	4	5
p.5. All in all, this training program improved my responses to alcohol and other drug related issues in my workplace.	1	2	3	4	5
p.6. This training program addressed practical constraints of responding to alcohol and other drug related issues.	1	2	3	4	5

PERCEIVED RELEVANCE OF TRAINING	Disagree	Tend to disagree	Unsure	Tend to agree	Agree
p.7. This training program effectively incorporated relevant workplace issues.	1	2	3	4	5
p.8. The content of this training program was appropriate for my current work needs.	1	2	3	4	5
p.9. This training program encouraged me to pursue further learning 'on-the-job'.	1	2	3	4	5
p.10. This training program was consistent with my job requirements.	1	2	3	4	5
p.11. This training program was too removed from my experiences at my workplace to be useful.	1	2	3	4	5
p.12. I have used some of the things I learnt at this training program in my work.	1	2	3	4	5

Personal and Organisational Demographics

Please circle the number in the right hand side that corresponds to the alternative that best describes your situation. For example, in the following question if you like summer better than winter, you would circle number one in the right hand side. Some questions ask you to write in the space provided.

Which do you like better summer or winter?	1	Summer	01
	2	Winter	02

TYPE OF ORGANISATION

1. What type of organisation do you work for? Please choose only ONE option.

1	AOD specialist service (including needle exchange)	01
2	Community health centre	02
3	Hospital	03
4	Pharmacy - community or hospital?	04
5	Accident and emergency service	05
6	Mental health - community or hospital?	06
7	Youth agency	07
8	Other health agency	08
9	Private practice	09
10	Social or welfare agency	10
11	Aboriginal Community Controlled Organisation	11
12	Juvenile justice	12
13	Corrections	13
14	Policing agency	14
15	Primary or secondary school	15
16	University	16
17	Other *(please specify)*.....	17

2. In which state or territory do you currently work?.....

3. Is the organisation you work for:

1	Government	01
2	Non-government	02
3	Private	03
4	Other *(please specify)*.....	04

4. Please indicate in which of the following geographic locations your workplace is situated. Please circle more than one option if your workplace has multiple sites in different geographic locations.

1	Major urban area (population between 100 000 – 1 million or more)	01
2	Other urban or country area (population between 1000 – 99 999)	02
3	Small country or rural area (population between 200 – 999)	03
4	Rural/remote area (population less than 200)	04

YOUR CURRENT POSITION AND OTHER DETAILS

5. What is your age in years? Years .....

6. What is your gender?

1	Male	01
2	Female	02

7. Which of the following best describes your current position in the workplace?

1	Director of organisation	01
2	Manager of department or unit	02
3	Team leader	03
4	Team member	04
5	Staff member (work in organisation, but not as part of a team)	05
6	Independent staff (work solo, e.g., rural worker, GP practice)	06
7	Self-employed	07
8	Other *(please specify)*.....	08

8. How long have you been working for this organisation? Please be as accurate as possible. Years ..... Months .....

9. In the context of your entire professional working life, how much experience do you have responding to alcohol and other drug related issues? Years ..... Months .....

10. Approximately what percentage of your time do you currently spend responding to alcohol and other drug related issues?

1	1-20%	01
2	21-40%	02
3	41-60%	03
4	61-80%	04
5	81-100%	05

11. What is your occupation? (e.g., youth worker, nurse, police officer, GP, drug counsellor, care worker, psychologist) My occupation is:

.....

12. Please circle your PRINCIPAL AREAS OF PRACTICE.
You can circle up to TWO areas of practice.

1	Administration	01
2	Service management and/or program and service development	02
3	Workforce development (e.g., staff development, training, policy)	03
4	Direct health treatment & intervention in primary health care settings (e.g., medicine, general practice, emergency response)	04
5	Direct health treatment & intervention in allied health services (e.g., AOD treatment agencies, pharmacy, psychology, mental health)	05
6	Social/welfare related work (e.g., community development/work, social work, advocacy, housing, child protection)	06
7	Health promotion/prevention work	07

TYPE OF ORGANISATION *(continued)*

12. *(continued)*

8	Education	08
9	Law enforcement, Policing or Correctional work	09
10	Other *(please specify)*	10

13. From the list of activities, what are your THREE main roles when responding to alcohol and other drug related issues in your workplace? Circle up to three activities:

1	Referral	01
2	Screening	02
3	Assessment	03
4	Education and/or information provision	04
5	Early/brief intervention	05
6	Crisis management	06
7	Emergency aid/services	07
8	Primary or allied health care service delivery	08
9	Medicine/general practice	09
10	Client care/support activities	10
11	Counselling/therapy	11
12	Case management	12
13	Health promotion/prevention	13
14	Community development and/or welfare activities	14
15	Medication prescribing	15
16	Medication dispensing	16
17	Withdrawal management	17
18	Administration	18
19	Service/program management	19
20	Workforce development (including staff support, training, policy)	20
21	Safety	21
22	Law enforcement/Policing (including diversion activities)	22
23	Other *(please specify)*	23

PREVIOUS AND CURRENT EDUCATION AND TRAINING

14. In the first column, please indicate THE HIGHEST formal qualifications you have COMPLETED in full.

    In the second column, please indicate if you are CURRENTLY ENROLLED in any formal education.

		COMPLETED	CURRENTLY ENROLLED
	SECONDARY EDUCATION		
1	Some secondary school – completed years 8 or 9	01	01
2	Secondary school – completed 10	02	02
3	Secondary school – completed 11	03	03
4	Secondary school – completed 12	04	04
	CERTIFICATE LEVEL		
5	Certificate I or II	05	05
6	Certificate III or IV	06	06
	ADVANCED DIPLOMA & DIPLOMA LEVEL		
7	Diploma Level	07	07
8	Advanced Diploma & Associate Degree Level	08	08
	BACHELOR DEGREE LEVEL		
9	Undergraduate degree (e.g., B.A, B.Sc)	09	09
10	Honours degree	10	10
	GRADUATE DIPLOMA & GRADUATE CERTIFICATE LEVEL		
11	Graduate Certificate	11	11
12	Graduate Diploma	12	12
	POSTGRADUATE DEGREE LEVEL		
13	Master Degree	13	13
14	Doctoral Degree	14	14
	OTHER EDUCATION		
15	Non-award courses *(please specify)*	15	15

QUALIFICATIONS IN RELATION TO ALCOHOL AND OTHER DRUGS

15. Have you undertaken or enrolled in any education or training where **alcohol and other drugs** are a PRIMARY FOCUS or a SUBSTANTIAL COMPONENT of the course?

YES → Go to Q.16

NO → Go to Q.17

16. In the first column, please indicate ALL qualifications you have COMPLETED where **alcohol and other drugs** were the primary focus or a substantial component of the course.

In the second column, please indicate if you are CURRENTLY ENROLLED in any education or training where **alcohol and other drugs** is a primary focus or a substantial component of the course.

		COMPLETED	CURRENTLY ENROLLED
1	Non-accredited training courses (including in-service)	01	01
2	Accredited short courses	02	02
3	Certificate II in Community Services (AOD work)	03	03
4	Certificate III in Community Services (AOD work)	04	04
5	Certificate IV in Community Services (AOD work)	05	05
6	Aboriginal Primary Health Care Certificate	06	06
7	Diploma of Community Services (AOD work)	07	07
8	Advanced Diploma of Community Services (AOD work)	08	08
9	Undergraduate degree	09	09
10	Honours degree	10	10
11	Diploma	11	11
12	Advanced Diploma	12	12
13	Graduate Certificate	13	13
14	Graduate Diploma	14	14
15	Masters	15	15
16	PhD/Doctorate	16	16
17	Other *(please specify)*	17	17

17. HAVE you received **ANY** form of **education and training covering alcohol and other drug related issues?** This can include all options listed in question 16, as well as an alcohol and other drug related subject/coursework within a more general course, in-service training, etc.

YES → Go to Q.18

NO → Go to end of questionnaire

18. Has the education and training you have received been useful in assisting you respond to alcohol and other drug related issues in your work?

YES → Go to Q.19

NO → Go to question 20 below

19. Of the education and training you have received, please RANK UP TO THREE of the MOST useful in terms of assisting you to respond to alcohol and other drug related issues in your current work.
(*please put a 1 next to the education or training that was most useful, a 2 next to that which was next useful and so on*).

		Rank 1st, 2nd & 3rd most useful
1	Alcohol and other drug related content or subject in a general course	_____
2	Non-accredited training courses (including in-service)	_____
3	Professionally endorsed qualification (eg., Hospital-based nursing, police training)	_____
4	Accredited short courses or accredited in-service	_____
5	Certificate II in Community Services (AOD work)	_____
6	Certificate III in Community Services (AOD work)	_____
7	Certificate IV in Community Services (AOD work)	_____
8	Diploma of Community Services (TAFE)	_____
9	Advanced diploma of Community Services (TAFE)	_____
10	Aboriginal Primary Health Care Certificate (TAFE)	_____
11	Undergraduate degree	_____
12	Honours degree	_____
13	Diploma (University)	_____
14	Advanced diploma (University)	_____
15	Graduate certificate	_____
16	Graduate diploma	_____
17	Masters	_____
18	PhD/Doctorate	_____
19	Other (please specify).....	_____

PREVIOUS EXPERIENCES WITH AOD EDUCATION & TRAINING: IMPACT ON WORK PRACTICES

Please circle the number which best describes your level of agreement with the following statements:

		Disagree	Tend to disagree	Tend to Agree	Agree
20.	Overall, the alcohol and other drug related education and training I have received helped me to improve my responses to alcohol and other drug related issues in my work.	**1**	**2**	**3**	**4**
21.	The alcohol and other drug education and training related directly to my work.	**1**	**2**	**3**	**4**
22.	The education and training provided me with the necessary knowledge and skills to respond to people with alcohol and other drug related issues.	**1**	**2**	**3**	**4**
23.	I need more education and training to increase my ability to respond appropriately to alcohol and other drug related issues.	**1**	**2**	**3**	**4**

Thank you for completing this questionnaire

Australian Government
Department of Health and Ageing